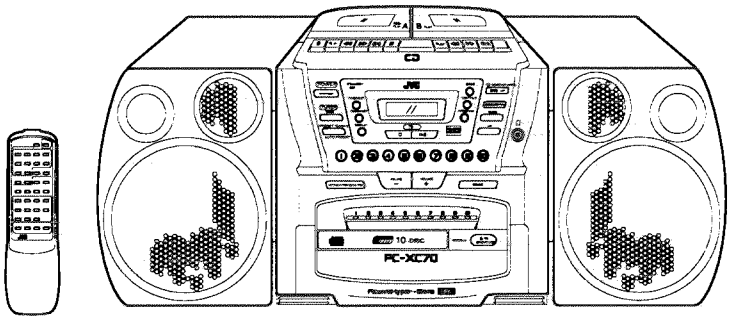
JVC

SERVICE MANUAL

PORTABLE CD CHANGER SYSTEM

PC-XC70BK U/US



COMPACT disc DIGITAL AUDIO

Area Suffix	
US	Singapore
U	Other Areas

■ Self- diagnosis function

This model has a convenient self - diagnosis function for CD section.

Contents

■ Safety Precautions.....Page 2
■ Important control point concerning safety..... 4
■ Instructions..... 5
[1] Location of Main Parts.....27
[2] Removal of Main parts.....32
[3] Main Adjustment.....40
[4] Wiring Connections Jig List..... 46
[5] Troubleshooting..... 47
[6] Block Diagram Wiring Connections
■ Integrated circuit..... 57
[7] Standard Schematic Diagram
■ Mic amplifier circuit..... 64
■ Changer driver circuit..... 64
■ Indicator/system microprocessor circuit.....65
■ Power amplifier circuit.....66
■ CD amplifier circuit..... 67
■ Cassette amplifier circuit..... 68
■ Tuner circuit..... 68
[8] Location of P.C.board and Parts List
■ Tuner Board..... 69
■ Main Board.....70
■ CD amplifier Board.....76
■ Power supply/key switch Board..... 78
[9] Exploded view of Enclosure Assembly
■ Speaker section..... 79
■ Enclosure assembly section..... 80
[10] Exploded view of Mechanism Assembly
■ CD changer section..... 82
■ Cassette mechanism section.....84
■ CD mechanism section.....86
[11] Illustration of Packing and Parts List..... 87

COPYRIGHT © 1996 VICTOR COMPANY OF JAPAN, LTD.

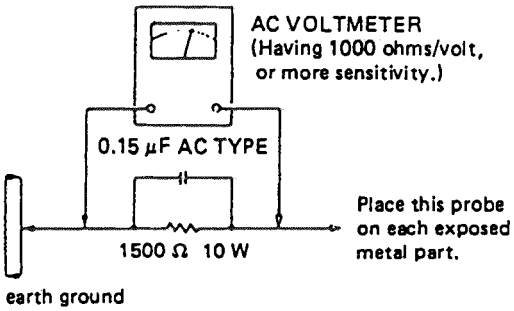
No.10013
October 1996

Safety Precautions

1. The design this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacture's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety — related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of service manual. Electrical components having such features are identified by shading(▭) and (⚠) on the schematic diagram and parts list in the service manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of service manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps , tubings, barriers and the like to be separated from live parts, high temperature parts, mpving parts and or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after reassembling.
5. Leakage current check (Electrical shock hazard testing)

   After re — assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock. Do not use a line isolation transformer during this check.

   • Plug the AC line cord directly into the AC outlet. using a"Leakage current tester", measure the leakage current from each exposed metal part of the cabinet, particulary any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exposeed 0.5mA AC(r.m.s.)

   
   AC VOLTMETER
(Having 1000 ohms/volt, or more sensitivity.)
0.15 μF AC TYPE
1500 Ω 10 W
Place this probe on each exposed metal part.
Good earth ground

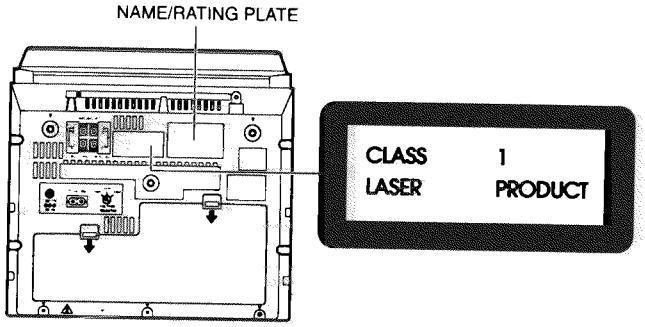
   • Alternate check method

   Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 ohms 10W resistor paralleled by a 0.15 μF AC type capacitor between an exposed metal part and a known good earth ground. Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC(r.m.s.).This corresponds to 0.5mA AC(r.m.s.).

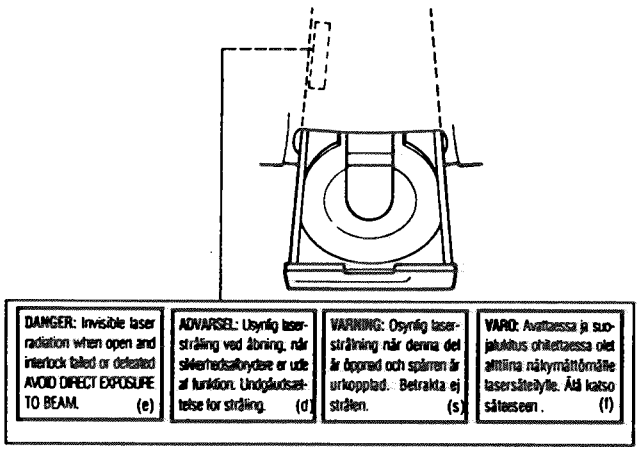
■ Safety Precautions

Important for Laser Products

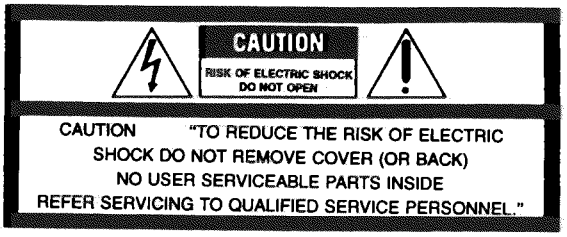
1. CLASS 1 LASER PRODUCT
2. DANGER: Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
3. CAUTION: Do not open the bottom cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
4. CAUTION: The compact disc player uses invisible laser radiation and is equipped with safety switches which prevent emission of radiation when unloading cartridge and the safety interlocks have failed or are defeated. It is dangerous to defeat the safety switches.
5. CAUTION: Use of controls of adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.



REPRODUCTION OF LABELS AND THEIR LOCATION


DANGER: Invisible laser radiation when open and interlock failed or defeated AVOID DIRECT EXPOSURE TO BEAM. (e)
ADVARSEL: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgåudsættelse for stråling. (d)
VARNING: Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen. (s)
VARO: Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen. (f)

Obs:
Apparaten innehåller laser-komponent av högre laserklass än klass 1.


CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN
CAUTION "TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK)
NO USER SERVICEABLE PARTS INSIDE
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL."

WARNING:
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

ADVERSEL: Usynlig laserstråling ved åbning. når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS: Varmuuskytkimen oliessa pois päältä kun laite avataan, siellä kehittyy näkymätöbtä lasersäteilä. Älä pane itseäsi säteilyn altiiksi.

VARNING: Osynlig laserståining uppstår vid komponentens öppning när säkerhetsbrytaren är frånslagen.

ADVARSEL: Usynling laserstråling ved åpning når sikkerhetsbryteren er ude af funktion Unngå utsettelse for stråling.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

⚠ Caution

Pay careful attention to burrs left on the chassis as they were borne by press and machine work.
When servicing, carefully handle the chassis not to get injured by burrs on it.

■Important control point concerning safety

1. Check the power transformer marking, and check that the power transformer is securely installed.
   Parts number : VTP66G2-12K

2. Check the power cord marking, and check that the power cord is not externally damaged.

	U/UT VERSION	US/VERSION
Cord mark :	◄VDE►	◄VDE►
Attachment plug :	KP-8K or SZ-4W	KP-419C
Connect plug :	KS-15 or SZ10	KS-15F

3. Check the AC socket marking, and check that the AC socket is tightly fixed in the P.C.board when installed. HSC1466.

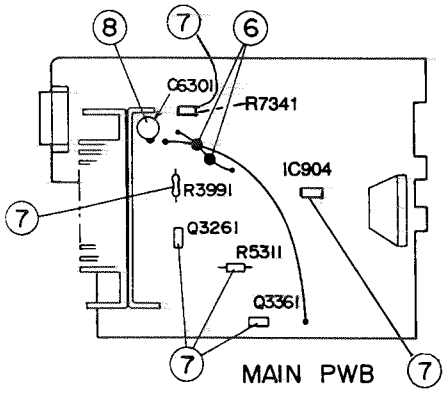
4. Check that there is sufficient space for the primary and adjacent secondary terminal parts on the P.C.board (There should be no protrusions of solder or terminal wires.)

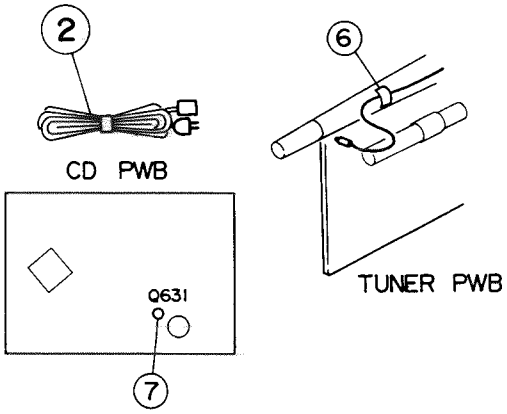
5. Check the rated fuse display, and check that the fuse is secure in the fuse holder. F1901 : T800mA/250V
   F1902 : T6.3mA/125V
   F1903 : T6.3mA/125V

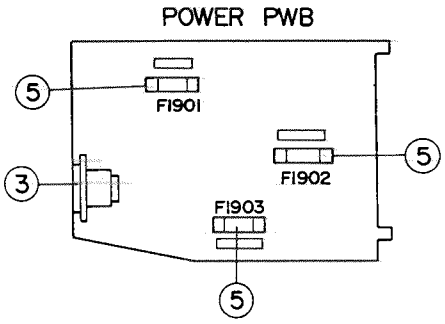
6. Check that the wires are neatly arranged so that they do not interfere with sections involving power, moving parts, heat generation, or those with sharp-edged parts.

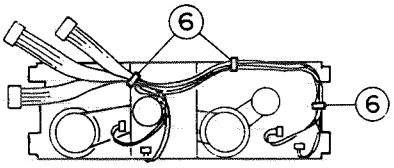
7. The following parts are important for safety in such operations as those involved with heat generation. Use the specified parts and check original shape. Heat generating parts should be suspended above the P.C.board not fallen down. Parts marked with [ ] are safety control parts.
   HEAT SINK,IC601,Q3191,Q3261,[Q631],IC602,[Q3361],
   [R5311],[R3891],D1901,[Q3261],Q3491,R6101,R6201,
   R6102,R6202,Q3571,[IC904],[R7341].

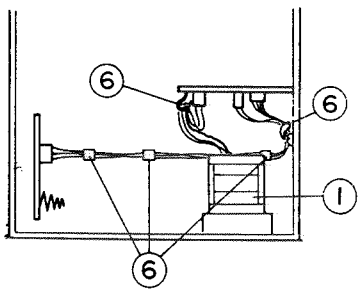
8. Confirm the following parts specified in the UL and CSA.: C361 (vending type)











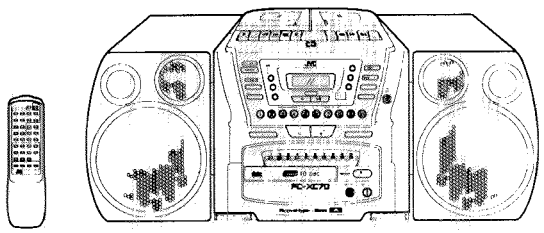
JVC

CD PORTABLE COMPONENT SYSTEM

SISTEMA PORTATIL DE COMPONENTES DE CD

便攜式 CD 組合音響設備

PC-XC70 U/US



COMPACT disc DIGITAL AUDIO

INSTRUCTIONS

INSTRUCCIONES

使用說明書

(No.10013) 5

Instructions

ENGLISH

Thank you for purchasing this JVC product. Please read these instructions carefully before starting operation to be sure to obtain optimum performance and a longer service life from the unit.

ESPAÑOL

Le agradecemos la adquisición de este producto de JVC. Por favor lea detenidamente las instrucciones antes de comenzar la operación para obtener de esta unidad un rendimiento optimo y una vida de servicio mas larga.

中文

承蒙您選購 JVC 公司的產品，謹致感謝。在使用之前，請仔細閱讀本使用說明書，以獲得理想的使用效果和更長的使用壽命。

CONTENTS

Features 3
Safety precautions 4
Handling precautions 4
Attaching/detaching the speakers 6
Connections 7
Power supply 8
Names of parts and their functions 12
Remote control unit 15
Switching the power on/off 17
Volume, tone and other controls 18
Handling CDs 20
Playing CDs 21
Handling cassette tapes 28
Cassette playback 29
Relay playback (From Deck B to Deck A) 29
Radio reception 30
Recording 33
Tape dubbing (Synchro start dubbing) 36
Microphone mixing 36
Clock adjustment 37
Timer operations 38
Maintenance 42
Troubleshooting 43
Specifications 43

WARNING:
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

INDICE

Características 3
Precauciones de seguridad 4
Precauciones de manipulación 4
Fijación/retiro de los altavoces 6
Conexiones 7
Alimentación 8
Nombres de las partes y sus funciones 12
Unidad de control remoto 15
Conexión/desconexión de la alimentación 17
Volumen, tono y otros controles 18
Manipulación de CD 20
Reproducción de CD 21
Manipulación de cassettes de cinta 28
Reproducción de cassettes 29
Reproducción por relevo (De la platina B a la platina A) 29
Radiorrecepción 30
Grabación 33
Copia de cinta (Copia con inicio sincronizado) 36
Mezcla de micrófonos 36
Ajuste del reloj 37
Operaciones por temporizador 38
Mantenimiento 42
Detección de problemas 43
Especificaciones 43

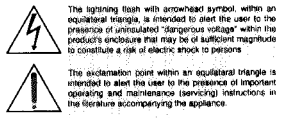
ADVERTENCIA:
PARA REDUCIR EL RIESGO DE INCENDIO O DE CHOQUES ELECTRICOS, NO EXPONGA ESTE APARATO A LA LLUVIA O A LA HUMEDAD.

目錄

特點介紹 3
安全須知 4
使用須知 4
裝／卸揚聲器 6
連接 7
電源 8
各部件的名稱以及功能 12
遙控器 15
電源的接通與斷開 17
音量、音調和其它控制 18
有關 CD 20
CD 唱片的放音 21
有關卡式錄音帶 28
卡式錄音帶的放音 29
連續播放（從 B 卡座到 A 卡座） 29
無線電廣播的接收 30
錄音 33
複製磁帶（同步開始複製） 36
麥克風混響 36
時鐘的調節 37
定時器的操作 38
保養 42
故障的檢查與排除 43
規格 43

警告：
為了防止火災以及觸電，請勿讓本機淋雨受潮。

CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN
CAUTION TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

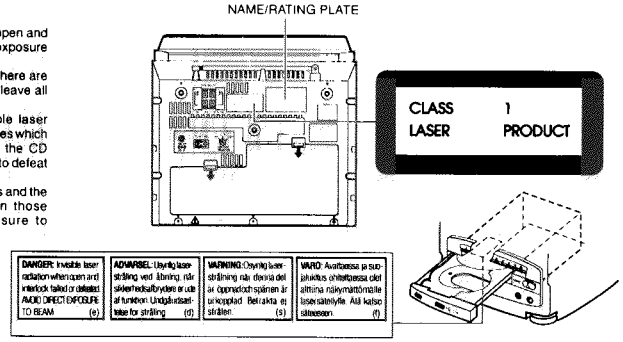
PC-XC70BK U/US

IMPORTANT FOR LASER PRODUCTS (For Singapore only)

PRECAUTIONS

1. CLASS 1 LASER PRODUCT
2. **DANGER:** Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
3. **CAUTION:** Do not open the rear cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
4. **CAUTION:** The CD player uses invisible laser radiation and is equipped with safety switches which prevent the emission of radiation when the CD holder or CD tray is open. It is dangerous to defeat the safety switches.
5. **CAUTION:** Use of controls for adjustments and the performance of procedures other than those specified herein may result in exposure to hazardous radiation.

REPRODUCTION OF LABELS AND THEIR LOCATION


NAME/RATING PLATE
CLASS 1
LASER PRODUCT
DANGER: Invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM (e)
ADVARSEL: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling (d)
VARNING: Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen! (s)
VARO: Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen (f)

FEATURES — CARACTERISTICAS — 特點介紹

Demo mode button (only when AC power is used)
When the AC power cord is plugged into an AC outlet, the unit enters the demo mode automatically. When you press the DEMO button while the unit's power is switched off, it also enters the demo mode. Indicators on the display window change in succession and the 10-CD changer indicators blink. To cancel this mode, press the DEMO button and the unit's power will be switched off.
- The demo mode is automatically cancelled after being engaged for 12 hours consecutively.

- Multi-function 10-CD changer
- Active Hyper-Bass PRO circuit for low-frequency sound reproduction
- Sound mode control
- One-touch operation (COMPU PLAY) (only when AC power is used)
- 37-key remote control unit
- Direct Disc Select/Skip Play/Search Play/ Continuous Play/Repeat Play/Random Play
- Programmed play of up to 20 tracks
- Double-cassette mechanism (Deck A for recording and playback, Deck B for playback)
- 3-Band digital synthesizer tuner with 45-station (15 FM, 15 AM and 15 SW) preset capability
- Seek/manual tuning
- Auto preset tuning
- Timer/Clock function
- Microphone mixing facility

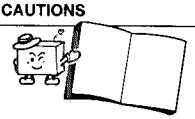
Botón del modo de demostración (sólo cuando se usa alimentación CA)
Cuando se conecta el cordón de CA en el tomacorriente de CA, la unidad activa automáticamente el modo de demostración. Cuando usted presiona el botón DEMO, mientras la alimentación de la unidad está desconectada, la misma activa el modo de demostración. Las indicaciones en el visor de indicación cambian en sucesión y las indicaciones del cambiador de 10 CD parpadean. Para cancelar este modo presione el botón DEMO y se desconectará la alimentación de la unidad.
- El modo de demostración queda automáticamente desactivado después de estar activado durante 12 horas consecutivas.

- Cambiador de 10 CD con múltiples funciones
- Circuito Active Hyper-Bass PRO para reproducción sonidos de baja frecuencia
- Control de modo de sonido
- Operación de un solo toque (COMPU PLAY) (para uso con CA exclusivamente)
- Unidad de control remoto con 37 teclas
- Selección directa de disco/reproducción con salto/reproducción con búsqueda/ reproducción continua/repetición de reproducción/reproducción aleatoria
- Reproducción programada hasta 20 pistas
- Mecanismo para dos cassettes (platina A para grabación y reproducción, platina B para reproducción)
- Sintonizador sintetizador digital de 3 bandas con capacidad para presintonización de 45 estaciones (15 de FM, 15 de AM y 15 de OC)
- Sintonización búsqueda/manual
- Sintonización programada automática
- Función de temporizador/reloj
- Instalación para mezclado de micrófono

演示模式鍵（僅用於 AC 電源開著的時候）
一旦交流電源線插入交流電源插座時，本機自動進入演示模式。當本機電源開著時，如果按 DEMO 鍵，本機也會進入演示模式。顯示窗的指示連續改變，10 個 CD 的指示燈將依次閃爍。要改變此模式時，按 DEMO 鍵，本機的電源將自動關閉。
- 若連續使用 12 小時以上，演示模式將自動取消。

- 多功能10 - CD交換器
- 用於產生低頻音響的有源式超低音（Active Hyper-Bass PRO）產生電路
- 聲音方式控制
- 單觸操作（COMPU PLAY）（僅當使用交流電源時）
- 37 鍵遙控器
- 直接碟片選擇/跳躍播放/搜索播放/連續播放/重復播放/隨機播放
- 最多 20 曲的編程播放
- 雙卡機構（ A 卡座用於錄音和播放， B 卡座用於播放）
- 具有預設 45 個電台（15 個FM，15 個AM和 15 個SW）能力的3波段數字合成調諧器
- 搜尋/手動調諧
- 自動預設調諧
- 定時/時鐘功能
- 麥克風混聲裝置

SAFETY PRECAUTIONS — PRECAUCIONES DE SEGURIDAD — 安全須知



Prevention of Electric Shocks, Fire Hazards and Damage
1. Even when the POWER button is set to STANDBY, a very small current will flow. To save power and for safety when not using the unit for an extended period of time, disconnect the power cord from the household AC outlet.
2. Do not handle the power cord with wet hands.
3. When unplugging from the wall outlet, always grasp and pull the plug, not the power cord.
4. Consult your nearest dealer when damage, disconnection, or contact failure affects the cord.
5. Do not bend the cord severely, or pull or twist it.
6. Do not modify the power cord in any manner.
7. To avoid accidents, do not remove screws to disassemble the unit and do not touch anything inside the unit.
8. Do not insert any metallic objects into the unit.
9. Unplug the power cord when there is a possibility of lightning.
10. If water gets inside the unit, unplug the power cord from the outlet and consult your dealer.
11. Do not block the unit's ventilation holes that allow heat to escape.
    Do not install the unit in a badly ventilated place.
12. Since this unit uses a motor-driven CD holder or CD tray, make sure that your hand or other object does not obstruct holder or tray movement.
13. Since the speaker sections of this unit are detachable, be sure that each speaker is firmly connected to the main unit when carrying the unit and avoid dropping or striking it, and other forms of impact.

POWER button
When the power cord is connected to a household AC outlet, the power indicator lights in red indicating the STANDBY mode. When the POWER button is pressed, the power indicator goes out and the display window lights.

When this unit is plugged into an AC outlet, it consumes a small current to operate the remote control and timer, or to back up the memory of the microprocessor, even when the POWER button is set to STANDBY.

Prevención de choques eléctricos, peligro de incendio y daños
1. Aunque el botón de alimentación POWER, esté colocado en espera STANDBY, fluye una pequeñísima corriente eléctrica. Para ahorrar energía y por seguridad cuando no utiliza esta unidad durante un largo período, desconecte el cordón eléctrico del tomacorriente de CA.
2. No manipule el cordón eléctrico con las manos mojadas.
3. Cuando lo desenchufa del tomacorriente de la pared, sujételo siempre por el enchufe, nunca por el cordón.
4. En caso de que el cordón sea afectado por daños, desconexión, o falso contacto, consulte a su agente más cercano.
5. No doble en ángulo agudo el cordón, no jale del mismo ni lo retuerza.
6. No modifique el cordón eléctrico de ninguna manera.
7. Para evitar accidentes, no extraiga los tornillos para desarmar la unidad y no toque nada dentro de la misma.
8. No inserte ningún objeto metálico dentro de la unidad.
9. Desenchufe el cordón eléctrico cuando haya posibilidad de caída de rayos.
10. Si se introduce agua dentro de la unidad, desenchufe el cordón eléctrico del tomacorriente y consulte a su agente.
11. No bloquee los orificios de ventilación de la unidad que permiten el escape de calor.
    No instale la unidad en un lugar mal ventilado.
12. Como esta unidad utiliza un portadisco o una bandeja de CD motorizado, asegúrese de que su mano u otro objeto no obstruya el movimiento del mismo.
13. Como los altavoces de esta unidad pueden ser extraídos, asegúrese de que cada altavoz esté firmemente conectado a la unidad principal y evite dejarlos caer, golpearlos o cualquier otra forma de impacto, cuando los transporte.

Botón POWER
Cuando se conecta el cordón eléctrico al tomacorriente de CA, el indicador de alimentación se enciende en rojo indicando el modo STANDBY. Cuando presiona el botón POWER, el indicador de alimentación se apaga y se enciende la ventanilla de indicación.

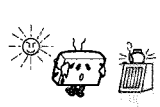
Esta unidad consume una pequeña corriente cuando se la conecta a un tomacorriente de CA, para hacer funcionar el controlador remoto y el temporizador, o para apoyo de la memoria del microprocesador, aún cuando se haya colocado el botón POWER en STANDBY.

為了預防觸電、火災以及故障
1. 即使將電源鍵（POWER）設於待機位置（STANDBY），仍然會有極少的電流流動。因此，為了省電與安全起見，當您長期不使用的時候，請將電源線從牆壁上的交流電源插座上拔下來。
2. 切勿用濕手拔電源線。
3. 當您要將電源線從牆壁上的電源插座上拔下來時，務請拿住插頭拔，切勿拿住電源線拔。
4. 如果發現電源線有損傷、脫落或者接觸不良，請與附近的銷售商聯絡。
5. 切勿過分彎折，或者拉拔，拗曲電源線。
6. 切勿以任何方式變更電源線。
7. 請切勿卸下螺絲來拆卸裝置，也不要碰觸裝置內部的任何部件，以免發生事故。
8. 切勿將任何金屬物件塞入裝置內。
9. 如果有雷電閃光的可能，請拔下電源線。
10. 萬一有水進入了裝置內，請將電源插頭從牆壁上的電源插座上拔下來，並且與銷售商聯絡。
11. 不要堵塞裝置的通氣孔，此通氣孔用於裝置的排熱。切勿將本裝置置於排熱條件差的地方。
12. 由於本機使用的是電動 CD 托架或 CD 托盤，所以請小心別讓手指或其它東西妨礙托架或托盤的運動。
13. 由於本機的揚聲器部件是可拆卸式的，所以在攜帶本機時注意各揚聲器是否與主機連接穩固，並注意避免跌落、撞擊或其他形式的撞擊。

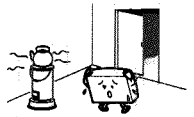
電源（POWER）鍵
當電源線連接到家用交流電源插座時，電源指示燈變為紅色以表示處於待機狀態。在按了電源鍵之後，電源指示燈熄滅，顯示窗點亮。

一旦將裝置的電源插頭插入市電交流電源插座，即使電源鍵（POWER）設於待機狀態（STANDBY），仍然會有少量的電流流入，以作為遙控器操作以及定時器、微型電腦記憶裝置的記憶之用。

HANDLING PRECAUTIONS — PRECAUCIONES DE MANIPULACION — 使用須知



Do not use this unit in direct sunlight or leave the unit in closed automobiles (or yachts, etc.) where it would be exposed to high temperatures above 40°C (104°F).



No utilice esta unidad bajo la luz directa del sol ni la deje en automóviles cerrados (o yates, etc.), donde podría quedar expuesta a temperaturas superiores a 40°C.

切勿在直射的陽光下使用本機，或將本機放置在溫度超過 40℃ 並關著車門的汽車（或遊艇等）內。

- **When abnormal operation occurs.**
  - Unplug the AC power cord from the AC outlet and remove all the batteries. Then reload the batteries after a few minutes, reconnect the AC power cord and switch the power ON.

1. **Avoid installing in the following places**
   - Where it could be subject to vibrations.
   - Where it is excessively humid, such as in a bathroom.
   - Where it could be magnetized by a magnet or speaker.
2. **Pay attention to dust**
   Be sure to close the CD holder or CD tray so that dust does not collect on the lens.
3. **Condensation**
   In the following cases, condensation may occur in the unit, in which case the unit may not operate correctly.
   - In a room where a heater has just been switched on.
   - In a place where there is smoke or high humidity.
   - When the unit is moved directly from a cold to a warm room.

   In these cases, set the POWER button to ON and wait 1 or 2 hours before use.
4. **Volume setting**
   CDs produce very little noise compared with analog sources. If the volume level is adjusted for these sources, the speakers may be damaged by the sudden increase of output level. Therefore, lower the volume before operation and adjust it as required during play.
5. **Do not place cassette tapes, etc. near the speakers**
   Since there are magnets in the speakers, do not place tapes or magnetic cards on them as recorded data could be erased.
6. **Keep this unit away from your TV**
   When this unit is used near a TV, the TV picture could be distorted. If this happens, move this unit away from the TV. If this does not correct the situation, avoid using this unit when the TV is turned on.
7. **Cleaning the cabinet**
   If the cabinet gets dirty, wipe it with a soft, dry cloth. Never use benzine or thinner as these could damage the surface finish.
8. **When listening with headphones**
   - Do not listen at high volumes as it could damage your hearing.
   - For safety, do not drive while listening to this unit.
9. **Carrying handle**
   Do not raise or lower the carrying handle with the telescopic antenna extended, to avoid damaging the antenna. Place the carrying handle so that it does not interfere with operation.
10. **It is recommended to switch the power OFF (STANDBY) when you transport the unit.**
    Otherwise a malfunction may occur in the unit.

- **Cuando ocurre una falla de funcionamiento.**
  - Desenchufe el cordón de CA del tomacorriente y extraiga todas las pilas. Luego recoloque las pilas después de transcurridos unos pocos minutos; reconecte el cordón de CA y conecte ON la alimentación.

1. **Evite instalarla en los siguientes lugares**
   - Donde pueda ser sujeta a vibraciones.
   - Donde haya humedad excesiva, tal como en un cuarto de baño.
   - Donde pueda ser magnetizada por un imán o altavoz.
2. **Preste atención al polvo**
   Asegúrese de cerrar el portadisco o compartimiento de CD para que el polvo no se deposite sobre la lente.
3. **Condensación**
   En los siguientes casos, puede producirse condensación dentro de la unidad y en consecuencia la unidad no funcionará correctamente.
   - En una sala donde haya un calentador encendido.
   - En un lugar donde haya humo o gran humedad.
   - Cuando se traslada rápidamente la unidad de una sala fría a una templada.

   En estos casos, coloque el botón POWER en ON (conectado) y espere 1 o 2 horas antes de utilizarla.
4. **Ajuste del volumen**
   Los productos de CD producen muy poco ruido comparados con las fuentes analógicas. Si ajusta el nivel de volumen para estas fuentes, es posible que los altavoces sean dañados por el incremento brusco del nivel de salida. Por ello, reduzca el volumen antes de la operación y ajústelo como desee durante la reproducción.
5. **No coloque cassettes de cinta, etc., próximos a los altavoces**
   Como hay imanes en los altavoces, no coloque cintas o tarjetas magnéticas sobre los mismos, ya que los datos grabados pueden ser borrados.
6. **Mantenga esta unidad lejos de su TV**
   Cuando se usa esta unidad próxima a un TV, la imagen de éste puede ser distorsionada. Si ello ocurre, mueva esta unidad lejos del TV. Si esto no corrige el problema, evite usar esta unidad cuando el TV está encendido.
7. **Limpieza del gabinete**
   Si el gabinete se ensucia límpielo con un paño suave y seco. Nunca utilice bencina o solventes ya que estos pueden dañar la terminación de la superficie.
8. **Cuando escucha con audífonos**
   - No escuche con volumen alto ya que esto puede dañar sus oídos.
   - Por seguridad no conduzca mientras escucha esta unidad.
9. **Manija para transporte**
   No levante ni baje la manija para transporte con la antena telescópica extendida para evitar daños de la misma. Coloque la manija para transporte de tal manera que no interfiera con la operación.
10. **Se recomienda desconectar OFF (STANDBY) la alimentación para transportar la unidad.**
    De lo contario puede ocurrir una falla de funcionamiento en la unidad.

- **當出現異常操作時。**
  - 從交流插座上拔下交流電源線並取出所有的電池。幾分鐘後重新裝入電池，然後重新連接上交流電源線並打開電源開關。

1. **避免放置於下列場所**
   - 有振動之處。
   - 有潮氣之處，諸如浴室之類。
   - 接近磁體、揚聲器等有磁場之處。
2. **注意灰塵**
   務請關上 CD 托架或 CD 托盤，不要讓灰塵帶污了鏡頭。
3. **結露**
   於下列情況，機內有可能結露。這時裝置有可能不能正常工作。
   - 剛打開取暖器的房間。
   - 有煙霧，或者過於潮濕的場所。
   - 從寒冷的房間直接移至溫暖的房間。

   於上述情況，接通電源以後，先等 1 至 2 小時，然後再使用。
4. **音量的調節**
   與模擬唱片聲源相比，CD 唱片的噪音極小。如果根據這些模擬聲源來調節音量的話，那麼揚聲器可能會因突然增大的音量而被損坏。因此在進行操作之前先降低音量，在放音期間根據需要進行調節。
5. **請勿將卡式錄音帶等物件放置於揚聲器附近**
   由於揚聲器內有磁體，所以切勿將錄音帶，或者磁卡放置於揚聲器之上，否則所記錄的資料將被消除。
6. **不要讓本機接近電視機**
   如果在電視機附近使用本機，電視機的畫面會失真。如果發生這種情況，請將本機搬離電視機。如果仍不能改善畫面的失真，則在觀看電視時不要使用本機。
7. **機殼的清潔工作**
   如果機殼上有污穢，請用柔軟的、乾燥的布擦拭。切勿使用石油精、這些溶液會損壞表面的精加工。
8. **當使用耳機收聽的時候**
   - 請勿用高音量聽，這將會損壞您的聽覺功能。
   - 為了安全起見，開車時不聽為好。
9. **提手**
   請勿在伸縮天線伸出時起落提手，以免損壞天線。請放好提手，使其不妨礙操作。
10. **移動本機時，建議您關閉電源（待機）**
    否則機器可能出現故障。

11. **Pay attention to the following**
    - Do not place the unit on an incline.
    - Do not apply shock to the unit.
    - Press the CD tray (▲) OPEN/CLOSE button to close the CD tray. (Do not close it by hand.).
    - It is recommended to remove CDs from the CD changer when you transport the unit.

11. **Preste atención a lo siguiente**
    - No coloque la unidad sobre un plano inclinado.
    - No permita que la unidad reciba choques.
    - Presione el botón OPEN/CLOSE (▲) del portadisco de CD para cerrarlo. (No lo cierre con la mano).
    - Se recomienda extraer los CD del cambiador de CD para transportar la unidad.

11. **請注意以下各點**
    - 請勿將本機放在傾斜面上。
    - 請勿讓本機受到沖擊。
    - 按 CD 托盤（▲） OPEN/CLOSE 鍵關閉 CD 托盤。（請勿用手關關。）
    - 移動本機時，盡可能把唱片從 CD 艙內取出。

ATTACHING/DETACHING THE SPEAKERS

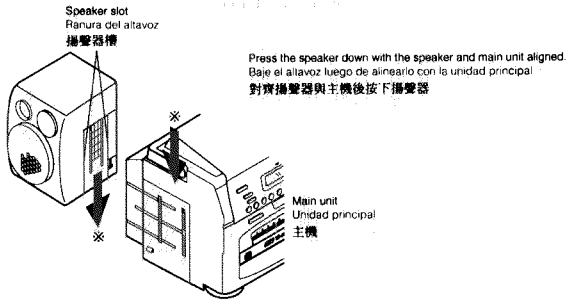
FIJACION/RETIRO DE LOS ALTAVOCES

裝／卸揚聲器

When using the speakers attached to the main unit
Align the bottom of the speaker against the top of the main unit and press down on the speaker to attach it.

Cuando utiliza los altavoces colocados en la unidad principal
Alinee la parte inferior del altavoz con la parte superior de la unidad principal y presione el altavoz hacia abajo para colocarlo.

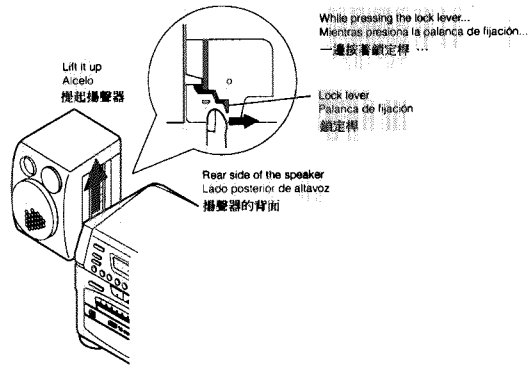
將揚聲器裝在主機上時
拿著揚聲器的底部，朝準主機的側面頂部並朝下按壓揚聲器即可裝上。



When using the speakers detached from the main unit
While pressing the lock lever at the rear bottom of speaker in the direction of the arrow, lift the speaker up to detach from the main unit.

Cuando utiliza los altavoces separados de la unidad principal
Mientras presiona la palanca de bloqueo ubicada en la parte trasera de la parte inferior del altavoz en la dirección de la flecha, levante el altavoz para separarlo de la unidad principal.

將揚聲器從主機上卸下時
按照箭頭方向按住位於揚聲器後底部的鎖定桿並提起揚聲器即可卸下。



Note:
Since the speakers sound differently according to where they are placed, carefully place them for optimal effect within the length of the provided speaker cords. It is recommended that the left and right speakers be placed symmetrically in relation to the main unit.

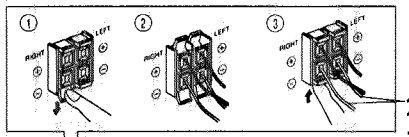
Nota:
Como los altavoces suenan diferente de acuerdo a dónde sean colocados, ubíquelos con precaución para obtener un efecto óptimo dentro de la longitud de los cordones para altavoz suministrados. Se recomienda colocar los altavoces izquierdo y derecho simétricamente en relación a la unidad principal.

註：
由於揚聲器的音響會因放置位置而異，請在所提供的揚聲器導線長度內將其放置於能獲得最佳效果的位置上。最好將左右揚聲器對稱於主機放置。

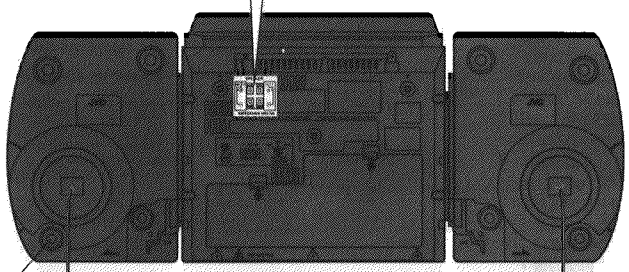
CONNECTIONS　CONEXIONES　連接

- Do not switch the power on until all connections are completed.
- No conecte la alimentación hasta haber completado todas las conexiones.
- 在完成所有連接之前，請勿接通電源。

- When connecting the speaker cords, connect the one marked with a line to the ⊖ terminal first.
- Cuando conecte los cordones de los altavoces, conecte primero el cordón marcado con una línea al terminal ⊖.
- 連接揚聲器導線時，先將標有線條的導線連接至“⊖”端子。



* Marked with line
* Marcado con una línea
• 標有線條



* Space for speaker cords
* Espacio para los cordones de los altavoces
• 放揚聲器導線餘線的地方

* After connecting the speaker cords, bundle any slack into the space for the speaker cords in the rear panel.
* Después de conectar los cordones de los altavoces, arrolle el sobrante dentro del espacio para los cordones de los altavoces, ubicado en el panel trasero.
• 連接揚聲器導線後，將鬆弛的導線部分捆在背面板上用於放揚聲器導線餘線的地方。

POWER SUPPLY　ALIMENTACION　電源

A. Operation on household AC

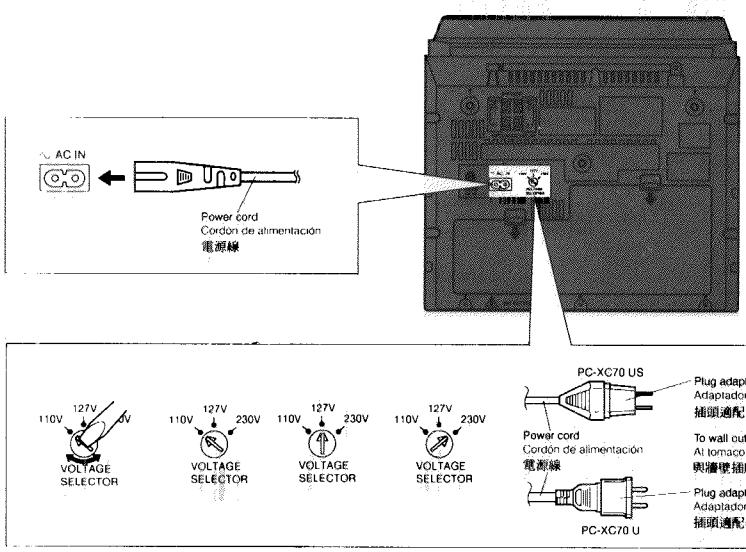
1. When this unit is used in an area where the supply voltage is different from the preset voltage, reset the voltage selector to the correct position.
2. Connect the AC power cord.

A. Operación con CA en el hogar

1 Cuando use esta unidad en un área donde la tensión es distinta a la preajustada, vuelva a ajustar el selector de tensión en la posición correcta.
2 Conexión del cable de corriente alterna

A. 使用家庭交流電源

1. 如果在與預設電壓不同的地方使用本機，請重新設定電壓，將電壓選擇器設定於正確的位置。
2. 連接交流電源線。



Note:
- The AC plug adapter is provided for this unit. If required, use it.

Nota:
- Se provee de un adaptador para enchufe de CA para esta unidad. Si fuera necesario, utilícelo.

註：
- 本機配備有交流電插頭適配器，如果需要可以使用。

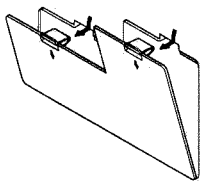
CAUTIONS:
1. **ONLY USE WITH JVC POWER CORD PROVIDED WITH THIS UNIT TO AVOID MALFUNCTION OR DAMAGE TO THE UNIT. REMOVE BATTERIES WHEN USING THE POWER CORD.**
2. **BE SURE TO UNPLUG THE POWER CORD FROM THE OUTLET WHEN GOING OUT OR WHEN THE UNIT IS NOT IN USE FOR AN EXTENDED PERIOD OF TIME.**

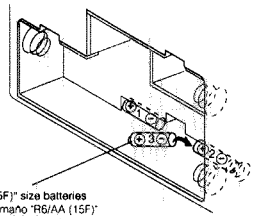
PRECAUCIONES:
1. **PARA EVITAR FALLAS O DAÑOS EN LA UNIDAD UTILICE EL CORDON DE ALIMENTACION DE JVC SUMINISTRADO CON ESTA UNIDAD. PARA UTILIZAR EL CORDON DE ALIMENTACION EXTRAIGA LAS PILAS.**
2. **ASEGURESE DE DESENCHUFAR EL CORDON DE ALIMENTACION DEL TOMACORRIENTES CUANDO SALGA O CUANDO NO VAYA A UTILIZAR LA UNIDAD POR UN LARGO PERIODO.**

注意：
1. **請務必使用配備的 JVC 電源線，以防功能失靈或者損壞設備。使用一般電源線時，請取出電池。**
2. **出門或者長期不使用本機時，請將電源插頭從電源插座上拔下。**

B. Batteries for memory back-up system

It is recommended that batteries are loaded to prevent the preset station memory and timer, etc. from being erased when there is a power failure, or when the AC power cord is disconnected.





"R6/AA (15F)" size batteries
Pilas de tamaño "R6/AA (15F)"
R6/AA (15F) 型電池

- **Loading batteries**
  Load three "R6/AA (15F)" size batteries (optional) into the battery compartment.

Notes:
- The three "R6/AA (15F)" size batteries supply the power to the memory back-up system which prevents the contents of memory being lost when there is a power failure, or the AC power cord is disconnected. Battery power is not consumed when the AC power cord is connected to the household AC outlet.
  (When the memory backup function is activated, the time is not displayed to reduce the power consumption.)
- When the AC power cord is not connected or the "R20/D (13F)" size batteries are not loaded, the batteries should be replaced with new ones approximately every three months. (Connect the AC power cord when replacing batteries in order to backup the memory. However, be sure to switch the power of main unit OFF.)

B. Pilas para el sistema de apoyo de memoria

Se recomienda instalar las pilas para evitar que se borre la memoria de estaciones presintonizadas, el temporizador, etc., cuando hay un corte de energía o cuando se desconecta el cordón de CA.

- **Colocación de las pilas**
  Coloque tres pilas de tamaño "R6/AA (15F)" (opcionales), dentro del compartimiento para las mismas.

Notas:
- Las tres pilas tamaño "R6/AA (15F)" suministran energía al sistema de apoyo de memoria que evita que los contenidos de la misma se pierdan cuando hay un corte de energía, o cuando se desconecta el cordón de CA. Si se conecta el cordón de alimentación a un tomacorrientes CA, la unidad no consume la energía de las pilas.
  (Si se activa la función de apoyo de memoria, la unidad no indica la hora para reducir el consumo de energía).
- Si el cordón de CA no está conectado o si las pilas tamaño "R20/D (13F)" no están colocadas, las pilas deben ser reemplazadas por nuevas cada tres meses aproximadamente.
  (Conecte el cordón de CA para reemplazar las pilas, y apoyar la memoria. Al mismo tiempo asegúrese de desconectar OFF la alimentación de la unidad principal).

B. 用於存儲保護系統的電池

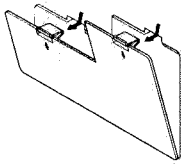
最好安裝上電池以避免當電源切斷或交流電源線被拔下時，原來的預置電台存儲和時間不被刪除。

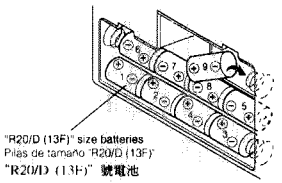
•安裝電池
將 3 節 R6/AA（15F）型電池（可選）裝入電池艙。

註：
- 3 節 R6/AA（15F）型電池向存儲保護系統提供電源，以避免當電源切斷或交流電源線被斷開時，原來的存儲內容不會丟失。當交流電源線連接在家用交流插座時，不消耗電池。
  （當存儲保護系統工作時，不顯示時間以節省電力。）
- 當交流電源線沒有連接或 R20/D（13F）型電池沒有安裝時，請每隔 3 個月換一次新電池。
  （交換電池時，連接交流電源線以保護存儲內容。但是，切記要關掉主機的單元開關。）

C. Operation on batteries

- **Loading batteries**
1. Open the battery cover by pulling it toward you while pressing the sections marked by the arrows.
2. Insert nine "R20/D (13F)" size batteries as shown in the diagram.
   * Be careful to insert the batteries with the ⊕ and ⊖ terminals positioned correctly.
3. Replace the cover.





"R20/D (13F)" size batteries
Pilas de tamaño "R20/D (13F)"
"R20/D (13F)" 號電池

Battery replacement
When the battery (▭) indicator lights during battery operation, the batteries are nearly exhausted and should be replaced. (When the battery indicator stays lit for approx. one minute, the unit is switched off.)

> When operating with batteries, to avoid any possible failure in recording or playback, the use of alkaline batteries with a longer service life is recommended.

- **For better battery usage**
  Continuous operation of the unit causes the battery power to be consumed quicker than noncontinuous operation.
  Operation of the unit in a cold place causes the battery power to be consumed more quickly than in a warm place.
- For power supply, the use of household AC is recommended, when continuous operation of the unit is required over a longer period of time.

CAUTIONS:
- **WHEN NOT USING THE UNIT FOR A LONG TIME (MORE THAN TWO WEEKS) OR WHEN ALWAYS USING HOUSEHOLD AC, REMOVE THE BATTERIES TO AVOID A MALFUNCTION OR DAMAGE TO THE UNIT.**
- **WHEN THE JVC POWER CORD PROVIDED WITH THIS UNIT IS CONNECTED, THE POWER IS AUTOMATICALLY SWITCHED FROM THE BATTERIES TO THE HOUSEHOLD AC EVEN WHEN THE BATTERIES ARE LOADED. HOWEVER, REMOVE THE BATTERIES WHEN USING THE POWER CORD.**

C. Operación con pilas

- **Colocación de las pilas**
1. Abra la tapa del compartimiento de las pilas jalándola hacia usted mientras presiona las secciones marcadas con las flechas.
2. Inserte nueve pilas "R20/D (13F)" como se muestra en el diagrama.
   * Tome precauciones para insertar las pilas con los terminales ⊕ y ⊖ correctamente posicionados.
3. Coloque la tapa.

Reemplazo de las pilas
Cuando se enciende la indicación de las pilas (▭) durante el funcionamiento con pilas, las mismas están casi agotadas y deben ser reemplazadas. (Cuando la indicación de las pilas permanece encendida durante un minuto aprox., la alimentación de la unidad se desconecta automáticamente).

> Cuando utilice las pilas, y para evitar cualquier falla posible en la grabación o en la reproducción, se recomienda utilizar pilas alcalinas con una vida de servicio más larga.

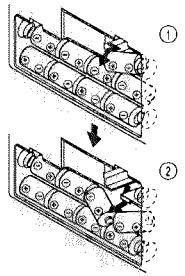
- **Para una mejor utilización de las pilas**
  Si este aparato se utiliza continuamente, las pilas se gastarán más rápido que si se utiliza de vez en cuando.
  Si se utiliza en un lugar frío, las pilas se consumirarán más rápidamente que si se utiliza en un lugar cálido.
- Para el suministro de energía se recomienda utilizar CA del hogar, cuando desee operar la unidad continuadamente durante un largo período.

PRECAUCIONES:
- **SI NO VA A UTILIZAR LA UNIDAD DURANTE LARGO TIEMPO (MAS DE DOS SEMANAS), O CUANDO UTILICE CA DEL HOGAR, EXTRAIGA LAS PILAS PARA EVITAR FALLAS DE FUNCIONAMIENTO O DAÑOS A LA UNIDAD.**
- **CUANDO SE CONECTA EL CORDON DE ALIMENTACION DE JVC DE ESTA UNIDAD, LA ALIMENTACION CONMUTA AUTOMATICAMENTE DE LAS PILAS A CA AUN CUANDO LAS PILAS ESTEN COLOCADAS. SIN EMBARGO RECOMENDAMOS QUE EXTRAIGA LAS PILAS CUANDO UTILIZA EL CORDON DE ALIMENTACION.**

C. 使用電池

- **裝電池**
1. 邊按標有箭頭的部位邊向外拉開電池艙蓋。
2. 如圖所示裝入9節 "R20/D (13F)" 號電池。
   * 請注意，應按正確的 ⊕ 與 ⊖ 端子位置裝入電池。
3. 重新蓋上艙蓋。

- **Unloading batteries**
- **Extracción de las pilas**
- **卸下電池**



更換電池
在使用電池工作中，電池（▭）指示燈點亮表示電池即將耗盡而應更換。（電池指示燈點 1 分鐘左右，本機電源即被切斷。）

> 使用電池工作時，最好使用供電時間較長的鹼性電池以避免在錄音或播放中出錯。

- **電池的經濟使用法**
  連續使用時的電池電力消耗得比間斷使用時快。
  在寒冷處使用時的電池電力消耗得比在溫暖處使用時快。
- 要長時間連續使用本機時，建議使用家用交流電源。

注意：
- **長時間（兩週以上）不使用本機或一直使用家用交流電源時，請取出電池以免造成故障或損壞本機。**
- **用本機附帶的 JVC 電源線連接電源時，即使裝有電池，電源也能自動從電池轉換為家用交流電源。但使用一般電源線時，請取出電池。**

CAUTIONS WHEN USING BATTERIES
When batteries are used incorrectly, it may result in the leakage of chemicals from the batteries or they may explode. The following care should be taken:
- Check that the positive ⊕ and negative ⊖ terminals of the batteries are positioned correctly and load them as shown in the diagram.
- Do not mix new and old batteries together, or mix different types of batteries.
- Do not try to recharge non-rechargeable batteries.
- Remove the batteries when the unit is not to be used for an extended period of time.

If chemicals from the batteries come in contact with your skin, wash them off immediately with water. If chemicals leak onto the unit, clean the unit completely.

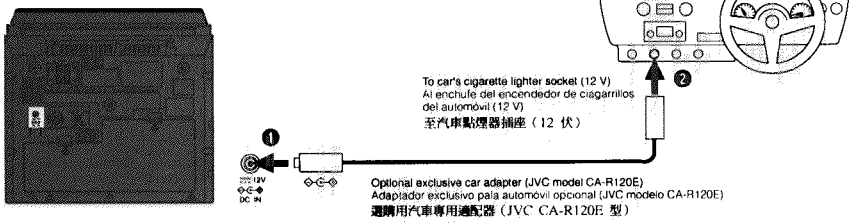
PRECAUCIONES PARA EL USO DE LAS PILAS
Si las pilas son incorrectamente usadas, ello puede resultar en fugas de productos químicos de las mismas o pueden explotar Es necesario tomar las siguientes precauciones:
- Verifique que los terminales ⊕ y negativos ⊖ de las pilas estén correctamente colocados de acuerdo al diagrama
- No mezcle pilas nuevas y viejas, ni mezcle diferentes tipos de pilas.
- No intente recargar las pilas que no sean recargables.
- Extraiga las pilas cuando no vaya a utilizar la unidad durante un largo periodo.

Si los productos químicos provenientes de las pilas entran en contacto con su piel, lávese inmediatamente con agua. Si los productos químicos caen sobre esta unidad, límpiela completamente.

使用電池時的注意事項
不正確使用電池會造成電池內的化學溶液外漏或電池爆裂。應注意下列各點：
- 檢查電池的正⊕負⊖極性是否正確放置，並且如圖所示安裝。
- 請勿混用新舊電池或不同類型的電池。
- 請勿試圖對非充電電池充電。
- 長期不使用本機時，請將電池取出。

如果電池內漏出的化學溶液沾在皮膚上，請立即用水將其洗去。如果化學溶液漏至本機，請完全擦淨本機。

D. Operation on car battery (DC 12 V)


To car's cigarette lighter socket (12 V)
Al enchufe del encendedor de cigarrillos del automóvil (12 V)
至汽車點煙器插座（12 伏）
Optional exclusive car adapter (JVC model CA-R120E)
Adaptador exclusivo para automóvil opcional (JVC modelo CA-R120E)
選購用汽車專用適配器（JVC CA-R120E 型）
DC IN 12V

- First connect the car adaptor to the DC IN 12 V jack, not the cigarette lighter socket, because shorting of a plug on the car may cause the fuse to blow out. In addition, be careful not to make a short-circuit between the plugs.
- **When using a car battery, be sure to use the specified car adaptor (JVC model CA-R120E) to prevent mishaps or damage resulting from different polarity design.**

D. Funcionamiento con la batería del automóvil (CC 12 V)

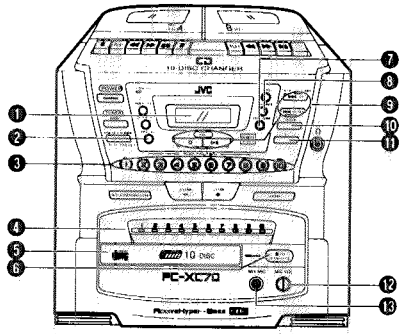
- Primero conecte el adaptador para automóvil en el jack DC IN 12 V, no conecte el enchufe para el encendedor de cigarrillos porque el corto del enchufe del automóvil puede hacer que se queme un fusible. Además, tome precauciones para hacer un cortocircuito entre enchufes.
- **Cuando utiliza la batería del automóvil asegúrese de utilizar el adaptador especificado para el vehículo (modelo CA-R120E de JVC), para evitar fallas o errores que resulten del diseño diferente de polaridades.**

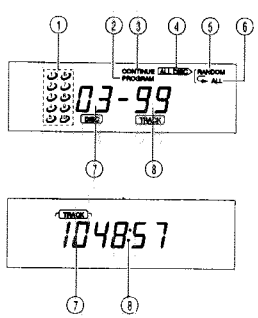
D. 使用汽車蓄電池（12 伏直流電）

- 先將汽車適配器插入 DC IN 12 V 插孔，而非點煙器插座，因為汽車上的插頭短路會造成保險絲熔斷。另外還要注意勿讓插頭間發生短路。
- **使用汽車蓄電池的時候，務請使用指定的汽車適配器（JVC CA-R120E 型），以防因極性設計不同而造成意外事故或損壞。**

NAMES OF PARTS AND THEIR FUNCTIONS / NOMBRES DE LAS PARTES Y SUS FUNCIONES / 各部件的名稱以及功能

CD changer section — **Sección del cambiador de CD** — **CD交換器部分**



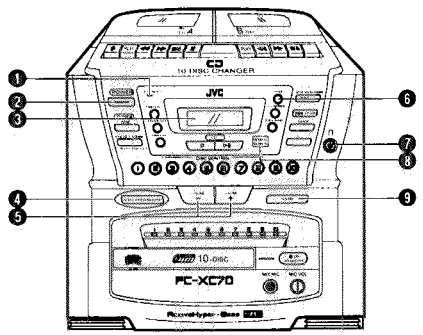


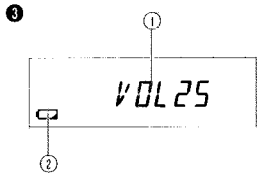
❶ Display window (Backlit when AC power is supplied.)
① Disc number display
② Program mode indicator (PROGRAM)
③ CONTINUE play indicator
④ ALL DISC indicator
⑤ RANDOM play indicator
⑥ Repeat play indicator (⊂ ALL)
⑦ Function/Disc number/Track number display
⑧ Track number/Playback time display
❷ DISPLAY button
❸ CD CONTROL buttons (DISC 1-DISC 10)
❹ 10-CD changer indicators
❺ CD tray
❻ CD tray (▲) OPEN/CLOSE button
❼ PROGRAM button
❽ CONTINUE play button
❾ CD operation buttons
Play/pause button (▷II):
Press to play a CD or to stop temporarily.
Stop/clear button (□):
Press to stop playing a CD or cancel programmed play.
CD SEARCH buttons (I◄◄, ►►I):
Press to locate the beginning of a track and to start forward/reverse search operations.
❿ TRACK button
⓫ +10 button
⓬ MIC VOL control
⓭ MIX MIC jack

❶ Visor de indicación (El visor de indicación se ilumina por detrás cuando se conecta la alimentación de CA.)
① Indicación del número de disco
② Indicador del modo de programa (PROGRAM)
③ Indicador de reproducción continuada (CONTINUE)
④ Indicador de todos los discos (ALL DISC)
⑤ Indicador de reproducción aleatoria (RANDOM)
⑥ Indicador de repetición de reproducción total (⊂ ALL)
⑦ Indicación de función/número de disco/número de pista
⑧ Indicación del número de pista/tiempo de reproducción
❷ Botón DISPLAY
❸ Botones de control de CD (CD CONTROL) (DISC 1-DISC 10)
❹ Indicadores del cambiador de 10 CD
❺ Portadisco de CD
❻ Botón (▲) de abertura/cierre (OPEN/CLOSE) del portadisco de CD
❼ Botón programa (PROGRAM)
❽ Botón de reproducción continuada (CONTINUE)
❾ Botones para operación del CD
Botón (▷II) de reproducción/pausa:
Presiónelo para reproducir un disco o para parar temporariamente.
Botón (□) de parada/borrado:
Presiónelo para detener la reproducción de un CD o para cancelar la reproducción programada.
Botones (I◄◄, ►►I) de búsqueda (SEARCH) del CD:
Presiónelos para ubicar el principio de una pista o para iniciar las operaciones de búsqueda hacia adelante/atrás.
❿ Botón TRACK
⓫ Botón +10
⓬ Control de volumen del micrótono (MIC VOL)
⓭ Jack del micrófono mezclador (MIX MIC)

❶ 顯示窗（交流電源接通時，顯示窗背光點亮。）
① 唱片號碼顯示
② 程序方式指示燈（PROGRAM）
③ CONTINUE（連續播放）指示燈
④ ALL DISC（所有唱片碟）指示燈
⑤ RANDOM（隨機播放）指示燈
⑥ 重複播放指示燈（⊂ ALL）
⑦ 功能/唱片號碼/樂曲號碼顯示
⑧ 樂曲號碼/播放時間顯示
❷ DISPLAY（顯示）鍵
❸ CD CONTROL（控制）鍵（DISC 1－DISC 10）
❹ 10－CD 顯示燈
❺ CD 托盤
❻ CD 托盤（▲）OPEN/CLOSE 鍵
❼ PROGRAM（節目）鍵
❽ CONTINUE（連續播放）鍵
❾ CD 操作鍵
播放/暫停鍵（▷II）：
播放或暫停 CD 時按。
停止/取消鍵（□）：
停止播放或取消預約播放時按。
CD SEARCH（搜尋）鍵（I◄◄,►►I）：
搜尋曲頭以及開始正向或反向搜尋操作時使用。
❿ TRACK（樂曲）鍵
⓫ +10 鍵
⓬ MIC VOL（麥克風音量）控制
⓭ MIX MIC（混響麥克風）插孔

General section





❶ Power STANDBY indicator
❷ POWER button
❸ Display window
① VOLUME level indicator
Sound mode indicators
Demo mode indicators
② Battery indicator (▭)

• See page 37 for the clock adjustment.

❹ ACTIVE HYPER-BASS PRO button and indicator
❺ VOLUME buttons (+, –)
❻ DEMO button
❼ Headphones jack (Ω) (3.5 mm dia. stereo mini)
Connect headphones (impedance 16 Ω to 1 kΩ) to this jack. Speaker sound is automatically switched off when the headphones are connected.
❽ REMOTE SENSOR section
❾ SOUND button

Sección general

❶ Indicador de espera (STANDBY) de alimentación
❷ Botón de alimentación (POWER)
❸ Ventanilla de indicación
① Indicación de nivel de VOLUME
Indicaciones del modo de sonido
Indicaciones del modo de demostración
② Indicador de pilas (▭)

• Para el ajuste del reloj vea la página 37.

❹ Botón e indicador de hiper grave activo profesional (ACTIVE HYPER-BASS PRO)
❺ Botones de volumen (VOLUME) (+, –)
❻ Botón DEMO
❼ Jack de audífonos (Ω) (mini estéreo de 3,5 mm. de diám.)
Conecte los audífonos (impedancia de 16 Ω a 1 kΩ), a este jack. El sonido de los altavoces se apaga automáticamente cuando se conectan los audífonos.
❽ Sección sensor remoto (REMOTE SENSOR)
❾ Botón SOUND

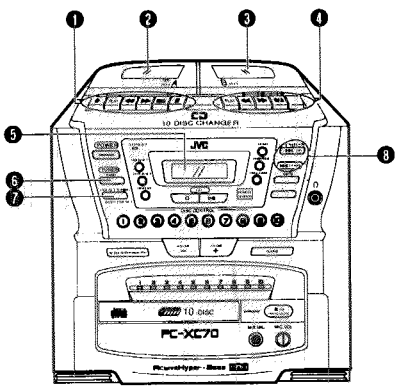
整體部分

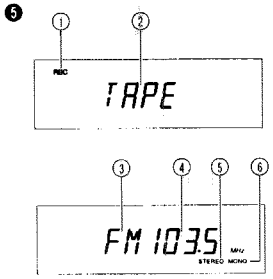
❶ 電源 STANDBY（待機）指示燈
❷ POWER（電源）鍵
❸ 顯示窗
① VOLUME 電平指示燈
聲音模式指示燈
演示模式指示燈
② 電池指示燈（▭）

• 關於時鐘調節，參見第 37 頁。

❹ ACTIVE HYPER-BASS PRO 鍵和指示燈
❺ VOLUME（音量）鍵（+、–）
❻ DEMO（演示）鍵
❼ 耳機插孔（Ω）（直徑 3.5mm、立體聲微型）
將耳機（阻抗 16Ω 至 1kΩ）連接至這個插孔。在連接了耳機時，揚聲器的聲音自動關掉。
❽ REMOTE SENSOR（遙控感應器）部分
❾ SOUND（聲音）鍵

Tuner/Deck section





❶ Cassette operation buttons
○ REC: Press this button with the ► PLAY button to start recording.
► PLAY: Press to play the tape.
◄◄ REW: Press to rewind the tape rapidly.
►► FF: Press to wind the tape forward rapidly.
■/▲ STOP/EJECT: Press to stop the tape. Pressing this button when the tape has stopped opens the cassette holder.
❚❚ PAUSE: Press to stop the tape temporarily. Press again to release the pause mode.
❷ Cassette holder (Deck A)
❸ Cassette holder (Deck B)
❹ Cassette operation buttons
► PLAY: Press to play the tape.
◄◄ REW: Press to rewind the tape rapidly.
►► FF: Press to wind the tape forward rapidly.
■/▲ STOP/EJECT: Press to stop the tape. Pressing this button when the tape has stopped opens the cassette holder.
❺ Display window
① Recording indicator (REC)
② Tape (TAPE) mode display
③ Band indicator
④ Radio frequency display
Preset station display
Channel space mode display
⑤ STEREO indicator
⑥ MONO indicator
❻ TUNER/BAND button
Press to select tuner mode.
Press to select the band.
❼ PRESET TUNING/AUTO PRESET button
❽ Tuning buttons (UP/DOWN)

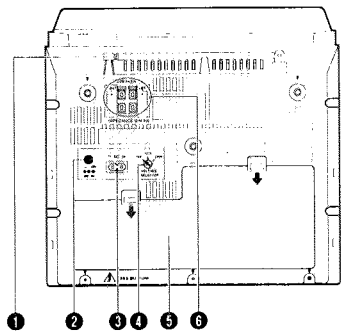
Sección del sintonizador/platina

❶ Botones para operación del cassette
○ REC: Presione este botón conjuntamente con el botón ► PLAY para iniciar la grabación.
► PLAY: Presiónelo para reproducir la cinta.
◄◄ REW: Presiónelo para rebobinar rápidamente la cinta.
►► FF: Presiónelo para avanzar la cinta hacia adelante rápidamente.
■/▲ STOP/EJECT: Presiónelo para detener la cinta. El presionar este botón cuando la cinta está detenida abre el portacassette.
❚❚ PAUSE: Presiónelo para detener la cinta temporariamente. Presiónelo otra vez para desactivar el modo de pausa.
❷ Portacassette (Platina A)
❸ Portacassette (Platina B)
❹ Botones para operación del cassette
►PLAY: Presiónelo para reproducir la cinta.
◄◄REW: Presiónelo para rebobinar rápidamente la cinta.
►► FF: Presiónelo para avanzar la cinta hacia adelante rápidamente.
■/▲ STOP/EJECT: Presiónelo para detener la cinta. El presionar este botón cuando la cinta está detenida abre el portacassette.
❺ Ventanilla de indicación
① Indicador de grabación (REC)
② Indicación del modo de cinta (TAPE)
③ Indicador de banda
④ Indicación de frecuencia de radio
Indicación de estación presintonizada
Indicación del modo de espacio canal
⑤ Indicador estereofónico (STEREO)
⑥ Indicador monofónico (MONO)
❻ Botón sintonizador/banda (TUNER/BAND)
Presiónelo para seleccionar el modo de sintonizador.
Presiónelo para seleccionar la banda.
❼ Botón de presintonización/presintonización automática (PRESET TUNING/AUTO PRESET)
❽ Botones arriba/abajo de sintonización (UP/DOWN)

調諧器／走帶機構（TUNER/DECK）部分

❶ 磁帶操作鍵
○ REC ：同時按此鍵和►PLAY 鍵以開始錄音。
► PLAY ：按此鍵以播放磁帶。
◄◄ REW ：按此鍵以快速倒帶。
►► FF ：按此鍵以快速進帶。
■/▲ STOP/EJECT：按此鍵以停止磁帶。在磁帶停止後按此鍵以打開磁帶艙。
❚❚ PAUSE ：按此鍵以暫停。再按此鍵即解除暫停模式。
❷ 磁帶艙（A 卡座）
❸ 磁帶艙（B 卡座）
❹ 磁帶操作鍵
► PLAY ：按此鍵以播放磁帶。
◄◄ REW ：按此鍵以快速倒帶。
►► FF ：按此鍵以快速進帶。
■/▲ STOP/EJECT：按此鍵以停止磁帶。在磁帶停止後按此鍵以打開磁帶艙。
❺ 顯示窗
① 錄音指示燈（REC）
② 磁帶（TAPE）模式顯示
③ 波段指示燈
④ 收音頻率顯示
預置電台顯示
頻道空間模式顯示
⑤ STEREO（立體聲）指示燈
⑥ MONO（單聲道）指示燈
❻ TUNER/BAND（調諧器/波段）鍵
按此鍵以選擇調諧器模式。
按此鍵以選擇波段。
❼ PRESET TUNING/AUTO PRESET（預置調諧/自動預置鍵）
❽ 調諧鍵（UP/DOWN）

Rear panel



❶ Telescopic antenna
❷ DC IN 12 V jack (⊖⊂◆)
❸ AC IN (AC input) jack
❹ VOLTAGE SELECTOR
❺ Battery compartment cover
❻ SPEAKER terminals
Connect the provided speakers to these terminals.

Panel trasero

❶ Antena telescópica
❷ Jack de entrada de CC de 12 V (DC IN 12 V) (⊖⊂◆)
❸ Jack AC IN (entrada de CA)
❹ Selector de voltaje (VOLTAGE SELECTOR)
❺ Tapa del compartimiento de las pilas
❻ Terminales de los altavoces (SPEAKER)
Conecte a estos terminales los altavoces suministrados.

後面板

❶ 伸縮天線
❷ 直流12 V輸入插孔（DC IN）（⊖⊂◆）
❸ 交流輸入插孔（AC IN）
❹ 電壓選擇器（VOLTAGE SELECTOR）
❺ 電池艙蓋
❻ 揚聲器端子（SPEAKER）
將附帶的揚聲器連接至這些端子。

REMOTE CONTROL UNIT　UNIDAD DE CONTROL REMOTO　遙控器

Preparation before use

- **Installing batteries in the remote control unit**

1. Remove the battery cover from the back of the remote control unit.
2. Insert two "R6/AA (15F)" size batteries.
   - Insert the batteries with the ⊕ and ⊖ terminals matching the indication inside the battery compartment.
3. Replace the cover.

Preparativos antes usarla

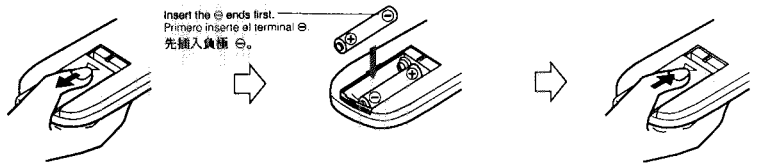
- **Instalación de las pilas en la unidad de control remoto**

1. Extraiga la tapa de las pilas de la parte trasera de la unidad de control remoto.
2. Inserte dos pilas de tamaño "R6/AA (15F)".
   - Inserte las pilas con los terminales ⊕ y ⊖ de acuerdo a la indicación en el interior del compartimiento de las pilas.
3. Recoloque la tapa.

使用前的準備工作

- **將電池裝入遙控器**

1. 打開遙控器背面的電池艙蓋。
2. 裝入 2 節 "R6/AA（15F）" 號電池。
   - 裝入的時候，按照電池艙內所示的方向裝，不要將 ⊕⊖ 端子弄錯。
3. 重新蓋上蓋子。



- **Battery replacement**
When the remote control operation becomes unstable or the distance from which remote control is possible decreases, replace the batteries.

- **Reemplazo de las pilas**
Cuando el funcionamiento del controlador remoto se vuelve inestable o la distancia dentro de la cual actúa se reduce, reemplace las pilas.

- **電池的更換**
如果遙控器的操縱失靈，或者操縱距離變得短了，此時請更換新的電池。

Using the remote control unit

- Point at the REMOTE SENSOR section and operate within about 7 m (approx. 23 ft).
- The remote control range is less when the unit is used at an angle.
- Do not expose the REMOTE SENSOR section to strong direct sunlight or artificial lighting.
- Make sure that there are no obstacles between the REMOTE SENSOR section and the remote control unit.

The following operations can be performed using the remote control unit.

- **Check the operation button functions carefully and operate them correctly.**

Utilización de la unidad de control remoto

- Apúntela hacia el sensor REMOTE SENSOR y hágala funcionar dentro de un radio de 7 m aprox.
- El radio de acción del controlador remoto es menor cuando se lo apunta en ángulo.
- No exponga el REMOTE SENSOR a la luz directa del sol o a fuerte iluminación artificial.
- Asegúrese de que no hayan obstáculos entre el REMOTE SENSOR y el controlador remoto.

Las siguientes operaciones deben ser ejecutadas utilizando la unidad de control remoto.

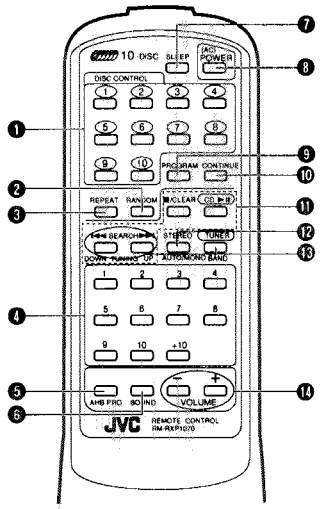
- **Compruebe detalladamente el funcionamiento de los botones de operación y opérelos correctamente.**

遙控器的使用方法

- 對準遙控傳感器（REMOTE SENSOR），並請在7米之內進行操作。
- 當以與裝置成一定的角度使用遙控器時，其遙控距離會減小。
- 不要讓遙控傳感器（REMOTE SENSOR）正對強烈的陽光或燈光。
- 確認在主機與遙控傳感器（REMOTE SENSOR）之間沒有障礙物。

使用遙控器可做下列各項操縱。

- **仔細檢查各個操縱鍵的功能，並且正確使用它們。**



❶ CD CONTROL buttons (DISC 1-DISC 10)
❷ RANDOM play button
❸ REPEAT play button
❹ Track number buttons (No. 1 to No. 10, +10)
Preset station buttons (No. 1 to No. 10, +10)
❺ ACTIVE HYPER-BASS PRO button
❻ SOUND button
❼ SLEEP button
❽ POWER (AC) button
- When the main unit power is supplied from batteries, this POWER (AC) button cannot turn on main unit power. (In this case, switch on the POWER button of the main unit first.)

❾ PROGRAM button
❿ CONTINUE play button

❶ Botones de control de CD (CD CONTROL) (DISC 1-DISC 10)
❷ Botón de reproducción aleatoria (RANDOM)
❸ Botón de repetición de reproducción (REPEAT)
❹ Botones (No. 1 a No. 10, +10) de número de pista
Botones (No. 1 a No. 10, +10) de estación presintonizada
❺ Botón de hiper grave activo profesional (ACTIVE HYPER-BASS PRO)
❻ Botón SOUND
❼ Botón del temporizador de desconexión (SLEEP)
❽ Botón de alimentación de CA (POWER (AC))
- Si la alimentación de la unidad principal proviene de pilas, el botón POWER (AC) no funciona como alimentación de la unidad principal. (En este caso, primero presione el botón POWER de la unidad principal).

❾ Botón programa (PROGRAM)
❿ Botón de reproducción continuada (CONTINUE)

❶ CD CONTROL 鍵（DISC1 DISC10）
❷ RANDOM（任選）播放鍵
❸ REPEAT（重複）播放鍵
❹ 樂曲號碼鍵（No.1 至 No.10，+10）
預設電臺鍵（No.1 至 No.10，+10）
❺ ACTIVE HYPER-BASS PRO（動態超重低音）鍵
❻ SOUND（聲音鍵）鍵
❼ SLEEP（睡眠鍵）鍵
❽ POWER（AC）鍵
- 當主機單元由電池供電時，此 POWER（AC）鍵不能打開主機電源。（這時，首先打開主機單元上的 POWER 鍵。）

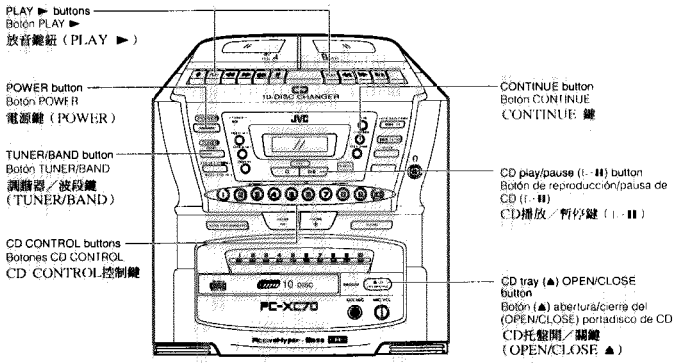
❾ PROGRAM（編序）鍵
❿ CONTINUE（連續）播放鍵

⑪ CD operation buttons
CD play/pause button (►II):
Press to play a CD or to stop temporarily.
Stop (■)/CLEAR button
SEARCH (I◄◄, ►►I) buttons
⑫ STEREO AUTO/MONO button
⑬ TUNER/BAND button
Press to select tuner mode.
Press to select the band.
Tuning buttons (UP/DOWN)
⑭ VOLUME buttons (+, –)

⑪ Botones para operación del CD
Botón de reproducción/pausa de CD (►II):
Presiónelo para reproducir o detener temporariamente la reproducción de un CD.
Botón de parada/borrado (■/CLEAR)
Botones de búsqueda (SEARCH) (I◄◄, ►►I)
⑫ Botón estereofónico automático/monofónico (STEREO AUTO/MONO)
⑬ Botón sintonizador/banda (TUNER/BAND)
Presiónelo para seleccionar el modo de sintonizador.
Presiónelo para seleccionar la banda
Botones arriba/abajo de sintonización (UP/DOWN)
⑭ Botones de volumen (VOLUME) (+, –)

⑪ CD 操作鍵
CD 播放/暫停鍵（►II）：
按此鍵以播放 CD 或暫停。
停止（■/CLEAR）鍵
SEARCH（I◄◄,►►I）鍵
⑫ STEREO AUTO/MONO 鍵
⑬ TUNER/BAND 鍵
按此鍵以選擇調諧器模式。
按此鍵以選擇波段。
調諧鍵（UP/DOWN）
⑭ VOLUME 鍵（+, –）

SWITCHING THE POWER ON/OFF — CONEXION/DESCONEXION DE LA ALIMENTACION — 電源的接通與斷開



Switching the power on/off
• Switching on:

STANDBY

The red indicator goes out.

• Switching off:

STANDBY

The red indicator lights. (The indicator does not light when the power is supplied by batteries.)

Conexión/desconexión de la alimentación
• Conexión:

La indicación roja se enciende.

• Desconexión:

La indicación roja se enciende. (La indicación no se enciende cuando la alimentación proviene de las pilas)

電源的接通與斷開
• 接通電源：

紅色指示燈熄滅。

• 斷開電源：

紅色指示燈點亮。（當用電池提供電源時，此指示燈不點亮。）

COMPU PLAY (only when AC power is used)

Even when the power is set to STANDBY, pressing the button shown below switches on the power and selects the source.

COMPU PLAY (solo cuando se usa CA)

Cuando la alimentación está colocada en STANDBY, el presionar el botón mostrado abajo conecta la alimentación y selecciona la fuente.

電腦控制放音（COMPU PLAY）（僅當使用交流電源時）

即使電源設於待機（STANDBY）方式，按壓下示鍵鈕可接通電源並選擇聲源。

	Function mode Modo de función 各項功能	Operations Operaciones 操作
	CD CD（電射唱片）	When this button is pressed with a CD loaded, CD playback begins. Cuando se presiona este botón habiendo un CD colocado, comienza la reproducción del mismo. 裝入CD唱片，按壓此鍵鈕，CD唱片的放音便開始。
	TAPE TAPE（錄音帶）	When this button is pressed with a tape loaded, tape playback begins. Cuando se presiona este botón habiendo una cinta colocada, comienza la reproducción de la misma. 裝入錄音帶，按壓此鍵鈕，錄音帶的放音便開始。
	TUNER TUNER（調諧器）	When this button is pressed, the tuner is engaged. Cuando se presiona este botón, se activa el sintonizador. 按壓此鍵鈕，調諧器便被接通。

When the timer display (⏲) is shown, the power of this unit is not switched on even when the deck's PLAY ► button is pressed.

Cuando aparece el indicador (⏲) del temporizador, la alimentación de esta unidad no se conecta aun cuando se presione el botón PLAY ► de la platina.

當定時器指示（⏲）顯示時，即使按了卡座的 PLAY ► 鍵，本機的電源也不會接通。

Notes:
- When switching off the power, be sure to press the POWER button.
- The COMPU PLAY button on the remote control has the same function as that on the main unit.

Notas:
- Para desconectar la alimentación asegúrese de presionar el botón POWER.
- El botón COMPU PLAY del controlador remoto tiene la misma función que el de la unidad principal.

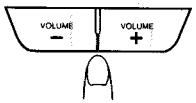
註：
- 要關閉電源時，一定要按壓POWER鍵鈕。
- 遙控器上的 COMPU PLAY 鍵鈕與主機上的具有相同的功能。

VOLUME, TONE AND OTHER CONTROLS — VOLUMEN, TONO Y OTROS CONTROLES — 音量、音調和其它控制

VOLUME buttons
+ : Use to increase the volume.
– : Use to decrease the volume.
(Control range from VOL 0 to VOL 25.)

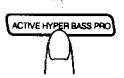
Botones VOLUME
+ : Uselo para aumentar el volumen.
– : Uselo para reducir el volumen.
(Los límites de control van de VOL 0 a VOL 25).

音量鍵（VOLUME）
+：用來增大音量。
–：用來減小音量。
（音量範圍從 VOL 0 至 VOL 25）



ACTIVE HYPER-BASS PRO button
ON : The ACTIVE HYPER-BASS PRO indicator lights up. Set to this position to activate ACTIVE HYPER-BASS PRO sound.
OFF: The ACTIVE HYPER-BASS PRO indicator goes out. Set to this position when ACTIVE HYPER-BASS PRO sound is not required.

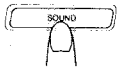
Botón de hiper graves activos profesionales (ACTIVE HYPER-BASS PRO)
ON : Se enciende el indicador ACTIVE HYPER-BASS PRO. Colóquelo en esta posición para activar el sonido hiper grave activo profesional.
OFF: Se apaga el indicador ACTIVE HYPER-BASS PRO. Colóquelo en esta posición cuando no desee escuchar el sonido de hiper grave activo profesional.



有源式超低音產生鍵（ACTIVE HYPER-BASS PRO）
接通：ACTIVE HYPER-BASS PRO 指示燈點亮。設定於此位置以啟動有源式超低音。
斷開：ACTIVE HYPER-BASS PRO 指示燈熄滅。當不需要有源式超低音時，設定於此位置。

Sound mode button
Sound modes can be selected to enhance the type of music being played.

- Press the SOUND button to select the sound mode.
- Each time the SOUND button is pressed the sound mode changes as follows;



FLAT → BEAT → POP → CLEAR → LIVE

Sound mode selection
FLAT (No sound effect (flat characteristics)):
Set to this position when listening to classical music.
BEAT:
Set to this position for music with a heavy beat, such as rock or disco music.
POP:
Set to this position for light music including popular and vocal music.
CLEAR:
Set to this position for crisp and clear sounding music with transparent highs.
LIVE:
Set to this position for the sound of live jazz music.

Note:
The sound modes only affect the sound output from the speakers or headphones. They do not affect the sound when recording.

Demo mode button (only when AC power is used)
When the AC power cord is plugged into an AC outlet, the unit enters the demo mode automatically. When you press the DEMO button while the unit's power is switched off, it also enters the demo mode. Indicators on the display window change in succession and the 10-CD changer indicators blink. To cancel this mode, press the DEMO button and the unit's power will be switched off.

- The demo mode is automatically cancelled after being engaged for 12 hours consecutively.

Botón de modo de sonido
Los modos de sonido pueden ser seleccionados para realzar el tipo de musica que está siendo reproducida.

- Presione el botón SOUND para seleccionar el modo de sonido.
- Cada vez que presiona el botón SOUND, el modo de sonido cambia de la siguiente manera.

FLAT → BEAT → POP → CLEAR → LIVE

Selección del modo de sonido
FLAT (Sin efectos de sonido (característica plana)):
Colóquelo en esta posición cuando escucha música clásica.
BEAT:
Colóquelo en esta posición para musica con ritmo pesado tal como rock o música de discoteca.
POP:
Colóquelo en esta posición para musica leve incluyendo musica popular y vocal.
CLEAR:
Colóquelo en esta posición para musica con sonido contrastado y nitido, con altos transparentes.
LIVE:
Colóquelo en esta posición para sonido de música de jazz en vivo.

Nota:
Los modos de sonido sólo afectan la salida de sonido de los altavoces o audifonos, pero no afectan el sonido de la grabación.

Botón del modo de demostración (sólo cuando se usa alimentación CA)
Cuando se conecta el cordón de CA en el tomacorriente de CA, la unidad activa automáticamente el modo de demostración. Cuando usted presiona el botón DEMO, mientras la alimentación de la unidad está desconectada, la misma activa el modo de demostración. Las indicaciones en el visor de indicación cambian en sucesión y las indicaciones del cambiador de 10 CD parpadean. Para cancelar este modo presione el botón DEMO y se desconectará la alimentación de la unidad.

- El modo de demostración queda automáticamente desactivado después de estar activado durante 12 horas consecutivas.

音源方式鍵
可以選擇聲音方式來增強正在播放音樂的音色。

- 按 SOUND 鍵選擇音源方式。
- 每按一次 SOUND 鍵，音源方式變化如下：

FLAT → BEAT → POP → CLEAR → LIVE

音源方式選擇
FLAT（無音響效果（平坦特性））：
聽古典音樂時設定於此位置。
BEAT：
設定於此位置以獲得帶重打擊樂（如搖滾或的士高）的音樂。
POP：
設定於此位置以獲得包括通俗音樂及聲樂的輕音樂。
CLEAR：
設定於此位置以獲得清脆、明晰的透亮高音。
LIVE：
設定於此位置以獲得輕爵士樂的聲音。

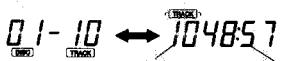
註：
聲音方式只會影響充揚聲器或頭帶式耳機輸出的聲音。在錄音時不會影響聲音。

演示模式鍵（僅用於 AC 電源關蕃的時候）
一旦交流電源線插入交流電源插座時，本機自動進入演示模式。當本機電源關著時，如果按 DEMO 鍵，本機也會進入演示模式。顯示窗的指示連續改變，10 個 CD 的指示燈將依次閃爍。要改變此模式時，按 DEMO 鍵，本機的電源將自動關閉。

- 若連續使用 12 小時以上，演示模式將自動取消。

DISPLAY button
When using the CD mode,

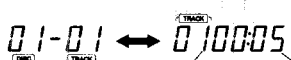
- The display shows the following when CDs are not rotated with this button pressed:



Total number of tracks
Número total de pistas
樂曲總數

Total playback time
El tiempo total de reproducción
總播放時間

- The display shows the following when the CDs are played with this button pressed:



Track number
Numero de pistas
樂曲號碼

Displays elapsed playback time of each tune being played back.
Se visualiza el tiempo transcurrido de reproducción de cada melodía.
顯示正在播放的樂曲的已播放時間。

Botón DISPLAY
Cuando se usa el modo CD,

- La indicación muestra lo siguiente cuando los CD no giran y este botón está presionado:

- La indicación muestra lo siguiente cuando se reproducen CD con este botón presionado:

DISPLAY 鍵
當使用 CD 模式時，

- 在 CD 不旋轉時按此鍵，顯示如下

- 在播放 CD 時按此鍵，顯示如下：

HANDLING CDs

Since dirty, damaged and warped CDs may damage the unit, take care regarding the following:

1. **Usable CDs**
   Use CDs with the mark shown.
2. **Notes on handling CDs**
   - Do not touch the reflective recorded surface.
   - Do not stick or write anything on the label side.
   - Do not bend CDs.
3. **Storage**
   - After removing a CD from the unit, be sure to put it back in its case.
   - Do not expose CDs to direct sunlight, high temperatures from a heater, etc., high humidity, or dust.
4. **Cleaning CDs**
   - Before loading a CD, wipe off any dust, dirt or fingerprints with a soft cloth. CDs should be cleaned by wiping radially from the center to the edge.

- **Never use thinner, benzine, record cleaner or antistatic spray.**

MANIPULACION DE CD

Como los CD sucios, dañados o alabeados pueden dañar la unidad, tome precauciones en relación a lo siguiente:

1. **CD utilizables**
   Utilice CD con la marca indicada.
2. **Notas sobre manipulación de CD**
   - No toque la superficie grabada reflejante.
   - No adhiera ni escriba nada sobre el lado de la etiqueta.
   - No doble los CD.
3. **Almacenamiento**
   - Después de extraer un CD de la unidad, asegúrese de colocarlo otra vez en su caja.
   - No exponga los CD a la luz directa del sol, altas temperaturas provenientes de un calentador, etc., alta humedad, o polvo.
4. **Limpieza de CD**
   - Antes de colocar un CD, limpie el polvo, suciedad o huellas digitales, con un paño suave. Los CD deben ser limpiados radialmente desde el centro hacia el borde.

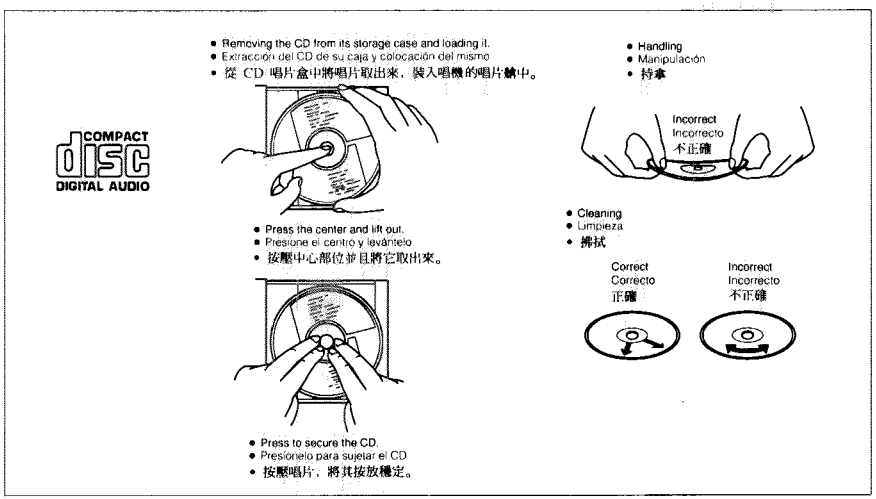
- **Nunca utilice solvente, bencina, limpiador de discos o aerosol antiestático.**

有關 CD

由於污穢的、損壞的、彎曲的唱片會損壞唱機，因此必須注意下列事項：

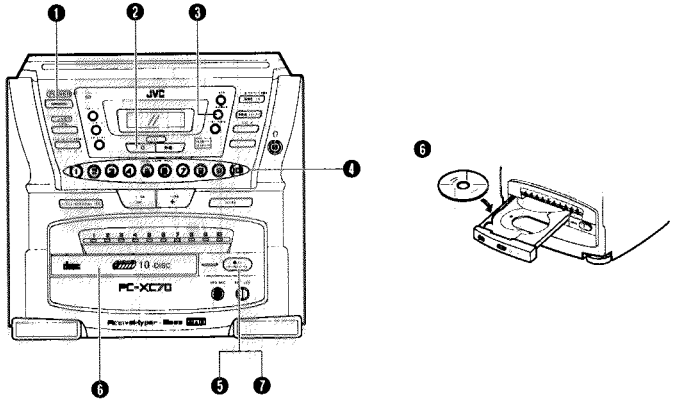
1. **可用的 CD 唱片**
   請使用有所示標記的 CD 唱片。
2. **關於使用 CD 唱片的注意事項**
   - 切勿觸摸如明鏡般反射的、錄有聲音的一面。
   - 切勿在有標籤的一面張貼或者書寫任何東西。
   - 切勿彎曲 CD 唱片。
3. **CD 唱片的保管**
   - 將 CD 唱片從唱機的唱片艙取出來以後，務必放回唱片盒。
   - 切勿讓 CD 唱片暴露於陽光下、取暖器等的高溫中、濕氣以及灰塵之中。
4. **CD 唱片的清潔**
   - 在將 CD 唱片裝入唱機之前，請用柔軟的布拭去灰塵、污穢以及指印。應該由中心往邊緣方向拂拭。

- **切勿使用稀釋劑、發揮性汽油、唱片清潔劑以及抗靜電噴霧劑。**



PLAYING CDs | REPRODUCCION DE CD | CD唱片的放音

Loading CDs | Colocación de CD | 裝入 CD



❶ Set the POWER button to ON.
❷ Press the □ button to set to the CD mode.
❸ Set the continuous play mode to off.
❹ Press the required CD CONTROL button (No. 1 to No. 10).
❺ Press the CD tray (▲) OPEN/CLOSE button.
❻ Load a CD with the label side facing up.
❼ Press the CD tray (▲) OPEN/CLOSE button to close the CD tray.
• Repeat the procedure ❹ through ❼.

Notes:
- Be sure to load CDs one at a time and place each CD correctly on the CD tray to prevent a malfunction. Never load multiple CDs on the CD tray at one time.
- 8 cm (3-3/16") CDs can not be used in this unit.

❶ Coloque el botón POWER en ON.
❷ Presione el botón □ para activar el modo CD.
❸ Coloque el modo de reproducción continua en desconectado.
❹ Presione el botón CD CONTROL correspondiente (No. 1 a No. 10).
❺ Presione el botón OPEN/CLOSE (▲) del portadisco de CD.
❻ Coloque un CD con el lado de la etiqueta apuntando hacia arriba.
❼ Presione el botón OPEN/CLOSE (▲) del portadisco de CD para cerrarlo.
• Repita el procedimiento de ❹ a ❼

Notas:
- Asegúrese de colocar un CD de cada vez y de colocarlos correctamente en el portadisco de CD para evitar fallas. Nunca coloque varios CD en el portadisco de una sola vez.
- Los CD de 8 cm no pueden ser usados con esta unidad.

❶ 將 POWER 開關設置到 ON。
❷ 按 □ 鍵以設置 CD 模式。
❸ 關閉連續播放模式。
❹ 按所需的 CD CONTROL 鍵（No.1 至 No.10）。
❺ 按 CD 托盤（▲）OPEN/CLOSE 鍵
❻ 將帶標簽面朝上裝入 CD。
❼ 按 CD 托盤（▲）OPEN/CLOSE 鍵以關閉 CD 托盤。
• 重複步驟 ❹ 至 ❼。

註：
- 切記一次只裝入一張 CD 並將每張 CD 正確地裝在 CD 托盤上以避免故障。切勿在 CD 托盤上一次裝入多張 CD。
- 本機不能使用 8cm CD。

Unloading CDs

❶ Press the required CD CONTROL button of the CD to be unloaded.
❷ Press the CD tray (▲) OPEN/CLOSE button to open the CD tray and unload the CD.
• Repeat procedure ❶ and ❷ to unload the other CDs.

• When the operation stops.
* Switch the power OFF (STANDBY) and ON again.

Extracción de CD

❶ Presione el botón CD CONTROL correspondiente al CD a ser extraído.
❷ Presione el botón OPEN/CLOSE (▲) del portadisco de CD para abrir el portadisco y extraer el CD.
• Repita el procedimiento ❶ y ❷ para extraer otros CD.

• Cuando la operación para.
* Desconecte la alimentación OFF (STANDBY) y conéctela ON otra vez.

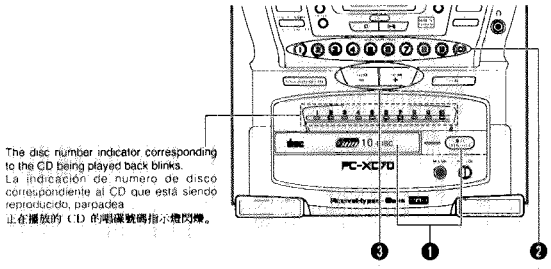
取出 CD

❶ 按想要取出的 CD 的 CD CONTROL 鍵。
❷ 按 CD 托盤（▲）OPEN/CLOSE 鍵以打開 CD 托盤並取出 CD。
• 重複步驟 ❶ 和 ❷ 以取出其它 CD。

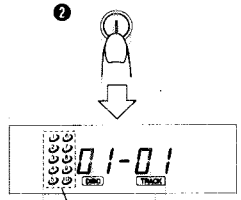
• 當操作停止時
• 關閉電源（STANDBY）後再打開電源。

(Example: When playing back a CD loaded in the Disc 1 position)
(Ejemplo: Cuando reproduce un CD colocado en la posición disco 1)
（例：在播放 Disc 1 位置上的 CD 時）

Operate in the order shown
Opere en el orden mostrado
按照下列順序操作



The disc number indicator corresponding to the CD being played back blinks.
La indicación de numero de disco correspondiente al CD que está siendo reproducido, parpadea
正在播放的 CD 的唱碟號碼指示燈閃爍。



Indicates that 10 CDs are loaded in the CD changer.
Indica que hay 10 CD colocados en el cambiador de CD
表示 CD 換片機中裝著 10 張 CD。

❶ Load the required CD into the CD changer. (See page 21.)
❷ Press the required CD CONTROL button (DISC 1) to start playback.
❸ Adjust.

Note:
When the POWER button is set to STANDBY, or another mode (TAPE or TUNER) is selected, the last CD played is stored in memory. The same CD will be played when the power is switched on again and the ▷·II button is pressed.

• When a CD CONTROL button is pressed with no CD loaded in the Disc position corresponding to the No. of the button, "no dISC" is displayed and the disc number display and 10-CD changer indicator go out.

❶ Coloque el CD deseado en el cambiador de CD. (Ver página 21)
❷ Presione el botón CD CONTROL correspondiente (DISC 1) para iniciar la reproducción
❸ Ajuste

Nota:
Cuando se coloca el botón POWER en STANDBY, o selecciona otro modo (TAPE o TUNER), el último CD reproducido es registrado en memoria. El mismo CD será reproducido cuando se conecte otra vez la alimentación y presione el botón ▷II

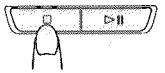
• Cuando presiona un botón CD CONTROL sin que haya un CD colocado en la posición de disco correspondiente al No. de botón, visualizará el mensaje "no dISC" y la indicación del número de disco y la del cambiador de 10 CD se apagarán.

❶ 將想要的 CD 裝入 CD 換片機。（參見第 21 頁。）
❷ 按想要的 CD CONTROL 鍵（DISC 1）以開始播放。
❸ 調節。

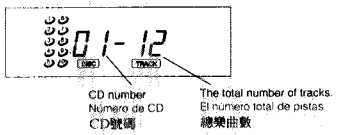
註：
當 POWER 鍵被設定在 STANDBY 位置，或選擇其它模式時，最後一次播放的 CD 將被記憶在記憶體內。當再次打開電源並按▷II鍵時，將播放同一張 CD。

• 當按了 CD CONTROL 鍵而相應號碼的唱碟位置上沒有裝入 CD 時，"no dISC" 顯示且唱碟號碼顯示和 10-CD 換片機指示燈熄滅。

• To stop in the middle of a CD
During play, press the stop/clear (□) button to stop play.



• Para detener la reproducción de un CD en la mitad de la misma
Presione el botón (□) de parada/borrado para detener la reproducción.



CD number
Número de CD
CD號碼

The total number of tracks.
El número total de pistas
總樂曲數

• 若要在播放 CD 時，停止播放
在播放期間，按壓停止／清除□鍵來停止播放。

• To stop a CD temporarily
Press the ▷II button to stop play temporarily. The indicators corresponding to the CD being played back blink. When pressed again, play resumes from the point where it was paused.

Notes:
- The following indication may appear when a CD is dirty or scratched, or when the CD is loaded upside down.
In such a case, check the CD and insert again after cleaning the CD or turning it over.

• Do not use the unit at excessively high or low temperatures. The recommended temperature range is from 5°C (41°F) to 35°C (95°F).
- If mistracking occurs during play, lower the volume.

• Para detener la reproducción de un CD temporariamente
Presione el botón ▷II para detener la reproducción temporariamente. Las indicaciones correspondientes al CD que está siendo reproducido comenzarán a parpadear. Al presionar el botón otra vez, la reproducción continúa desde el punto dónde se efectuó la pausa.

Notas:
- La siguiente indicación puede aparecer cuando el CD está sucio o rayado, o cuando se lo ha colocado al revés.
En tal caso, inspeccione el CD y colóquelo otra vez después de limpiarlo o de girarlo.

• No utilice la unidad en temperaturas excesivamente altas o bajas. Los límites de temperatura recomendados son de 5°C a 35°C.
- Si ocurre un error de seguimiento durante la reproducción, baje el volumen.

• 若要暫停 CD
按壓▷II鍵來暫停播放。當再次按壓此鍵時，CD 將從暫停的位置開始重新播放。

註：
- 當 CD 變髒或划傷時，或 CD 面朝上時，將會出現下面的指示。
當發生這種情況時，先清潔 CD 或將其反個面後，重新檢查 CD 并再次插入。

• 請勿在過高或過低的溫度下使用本機。推薦的溫度範圍為 5°C 到 35°C。
- 若在播放期間發生尋曲錯誤，請降低音量。

- Mistracking may occur if a strong shock is applied to the unit or if it is used in a place subject to vibrations (i.e. in a car travelling on a rough road).

Skip play

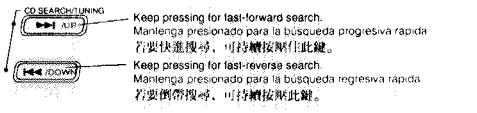
- During play, it is possible to skip forward to the beginning of the next track or back to the beginning of the track being played or the previous track; when the beginning of the required track has been located, play starts automatically.

To listen to the next track...
Press the ▶▶| button once to skip to the beginning of the next track.

To listen to the previous track...
Press the |◀◀ button to skip to the beginning of the track being played. Press twice quickly to skip to the beginning of the previous track.

Search play (to locate the required position on the CD)

- The required position can be located using fast-forward or reverse search while playing a CD.



- Hold down the button; search play starts slowly and then gradually increases in speed.
- Since low-volume sound (at about one quarter of the normal level) can be heard in the search mode, monitor the sound and release the button when the required position is located.

- Los errores de seguimiento pueden ocurrir si la unidad recibe un choque fuerte o si se la usa en un lugar sujeto a vibración (ej. un automóvil en marcha en una carretera irregular).

Reproducción con salto

- Durante la reproducción es posible saltar hacia adelante hasta el principio de la próxima pista o hacia atrás hasta el principio de la pista que está siendo reproducida o de la pista anterior; cuando haya localizado el principio de la pista deseada, la reproducción se inicia automáticamente.

Para escuchar la próxima pista...
Presione una vez el botón ▶▶| para saltar al principio de la próxima pista.

Para escuchar la pista anterior...
Presione el botón |◀◀ para saltar al principio de la pista que está siendo reproducida. Presiónelo dos veces rápidamente para saltar al principio de la pista anterior.

Reproducción con búsqueda (para localizar la posición deseada en el CD)

- La posición deseada puede ser ubicada utilizando la búsqueda de avance rápido o invertida mientras reproduce un CD.

- Mantenga presionado el botón; la búsqueda con reproducción se inicia lentamente y luego aumenta gradualmente la velocidad.
- Como en el modo de búsqueda es posible escuchar el sonido a bajo volumen (aproximadamente a un cuarto del nivel normal), monitoree el sonido y suelte el botón cuando haya localizado la posición deseada.

- 如果主機受到強烈衝擊或在受震動的地方使用（如在不平坦的路面上行駛的汽車中），有時會發生跳曲現象。

跳越放音

- 在放音中，可以往前跳越至下一樂曲的曲頭或者往後跳越至放音中樂曲的曲頭或者是已經放音的前一支樂曲的曲頭。當您要選聽的樂曲的曲頭被找到後，就會自動開始播放。

聽下一支樂曲…
若要聽下一支樂曲，按壓一下▶▶|鍵便可跳越至下一樂曲的曲頭。

聽前一支樂曲…
若要聽前一支樂曲，按壓一下|◀◀鍵便可跳越至放音中樂曲的曲頭；如果快速按壓兩次便可以跳越至前一支樂曲的曲頭。

搜尋放音（在 CD 唱片中搜尋您所需要的某個位置）

- 若要在 CD 唱片中搜尋您所需要的某個位置，可以在放音中，用快進搜尋或者倒帶搜尋來進行。按住此鍵來快速反向搜尋。

- 按壓住鍵，搜尋開始的時候慢，然後逐漸增快。
- 在搜尋的過程中您可以聽到較低的聲音（約為普通音量的四分之一），當您聽到您所需要之處時，請放開按壓著的鍵。

Continuous play

How to play all tracks

Operate in the order shown

Reproducción continuada

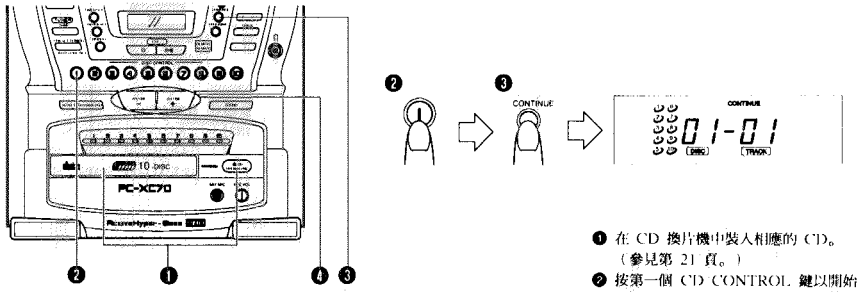
Reproducción de todas las pistas

Opere en el orden mostrado

連續播放

播放所有樂曲的方法

按照下列順序操作



❶ Load the required CDs in the CD changer. (See page 21.)
❷ Press the No. 1 CD CONTROL button to start play.
❸ Press the CONTINUE button to set to continuous play mode.
❹ Adjust.
- CD play starts from Disc 1 and continues to the last track of the last CD in the CD changer.

❶ Coloque los CD deseados en el cambiador de CD. (Ver página 21.)
❷ Presione el botón CD CONTROL No. 1 para iniciar la reproducción.
❸ Presione el botón CONTINUE para activar el modo de reproducción continua.
❹ Ajuste.
- La reproducción de CD comienza por el disco 1 y continúa hasta la última pista del último CD colocado en el cambiador.

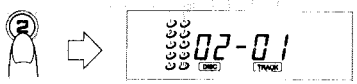
❶ 在 CD 換片機中裝入相應的 CD。（參見第 21 頁。）
❷ 按第一個 CD CONTROL 鍵以開始播放。
❸ 按壓 CONTINUE 鍵來設定成連續播放方式。
❹ 調節。
- CD 播放將從 唱碟 1 開始并連續播放到 CD 交換器上的最後一首樂曲。

- When 10 CDs are loaded in the CD changer, continuous play can be started by pressing any CD CONTROL button (DISC 1 to DISC 10). Continuous play ends with the last track of the CD loaded in the CD changer.

DISC CONTROL button

- **Direct Disc Selection**
Press the CD CONTROL button (DISC 1 to DISC 10) corresponding to the No. of the required CD.

Example: To designate Disc 2.



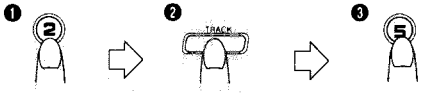
The tracks on the designated CD are played in sequence.

Note:
- When "PROGRAM" is shown in the display and the direct select operation is performed, the CD cannot be played.

TRACK button

- **Direct Track Selection**
Press the CD CONTROL button (DISC 1 to DISC 10) after pressing the TRACK button.

Example: To designate the 5th track of Disc 2



❶ Press the No. 2 CD CONTROL button.
- The track number is displayed.

❷ Press the TRACK button.
❸ Press the No. 5 CD CONTROL button.

- To designate track numbers 1 to 10, press the CD CONTROL button (DISC1 to DISC 10) corresponding to the track number.
- To designate track number 11 or higher, press the +10 button the required number of times, then a CD CONTROL button. (Example: To designate the 20th track, press the +10 button once, then press the DISC 10 button.)

* **+10 button:**
Each time this button is pressed, the number increases by 10. First press this button to set the 10's digit, then press the CD CONTROL button (DISC 1 to DISC 10) to set the 1's digit.

- Si se colocan 10 CD en el cambiador de CD, la reproducción continua puede ser iniciada presionando cualquier botón CD CONTROL (DISC 1 a DISC 10). La reproducción continua termina cuando el cambiador de CD reproduce la última pista del último CD colocado.

Botón DISC CONTROL

- **Selección directa de disco**
Presione el botón (DISC 1 a DISC 10) de CD CONTROL correspondiente al No. del CD deseado.

Ejemplo: Para designar el disco 2.

La unidad reproduce en secuencia las pista del CD designado.

Nota:
- Cuando aparece "PROGRAM" en la indicación y se ejecuta la operación de selección directa, el CD no es reproducido.

Botón TRACK

- **Selección directa de pista**
Presione el botón CD CONTROL (DISC 1 a DISC 10), después de presionar el botón TRACK.

Ejemplo: Para seleccionar la 5ª pista del disco 2.

❶ Presione el botón CD CONTROL No. 2.
- Aparece indicado el número de pista.

❷ Presione el botón TRACK.
❸ Presione el botón CD CONTROL No. 5.

- Para seleccionar las pistas del número 1 al 10, presione el botón CD CONTROL (DISC 1 a DISC 10), correspondiente al número de pista.
- Para seleccionar el número de pista 11 o mayor, presione el botón +10 el número de veces necesarias, y después presione un botón CD CONTROL. (Ejemplo: Para seleccionar la pista 20, presione el botón +10 una vez y después el botón DISC 10).

* **Botón +10:**
Cada vez que presiona este botón, el número aumenta en 10 unidades. Primero presione este botón para ajustar el dígito número 10, y después presione el botón CD CONTROL (DISC 1 a DISC 10) para ingresar el 1er. dígito.

- 當 CD 換片機中裝有 10 張 CD 時，可以通過按任何一個 CD CONTROL 鍵（DISC1 至 DISC10）來開始連續播放。連續播放終止於 CD 換片機中裝著的 CD 的最後一首樂曲。

DISC CONTROL 鍵

- **直接唱碟選擇**
按壓對應於想要播放的 CD 的 CD CONTROL 鍵（DISC1－DISC10）。

例：指定唱碟 2。

按順序播放指定的 CD 上的樂曲。

註：
- 當顯窗內出現"PROGRAM"并進行了直接選擇操作時，將不能播放 CD。

TRACK 鍵

- **直接樂曲選擇**
在按 TRACK 鍵後按 CD CONTROL 鍵（DISC1 至 DISC10）。

例：要指定唱碟 2 的第 5 首樂曲。

❶ 按第 2 個 CD CONTROL 鍵。
- 樂曲號碼顯示。

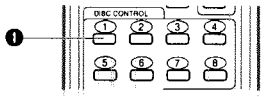
❷ 按 TRACK 鍵。
❸ 按第 5 個 CD CONTROL 鍵。

- 要指定樂曲號碼 1 至 10，按與樂曲號碼相應的 CD CONTROL 鍵（DISC1 至 DISC10）。
- 要指定 11 以上的樂曲號碼，按所需次數的＋10 鍵，然後按 CD CONTROL 鍵。（例：要指定第 20 首樂曲，按一次＋10 鍵，然後按 DISC 10 鍵。）

* **＋10 鍵：**
每按一次＋10 鍵，數字增加 10。先按此鍵以設定十位數，然後按 CD CONTROL 鍵（DISC1 至 DISC10）以設定一位數。

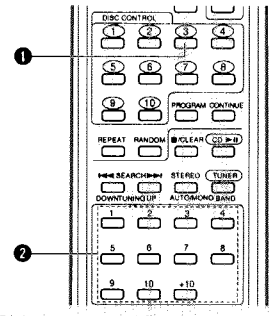
Direct access play (using the remote control unit)

Example 1: To designate Disc 1.



❶ Designate the required CD using CD CONTROL button (DISC 1 to DISC 10).
- CD play starts.

Example 2: To designate the 3rd track of Disc 3.



❶ Designate the required CD using the CD CONTROL buttons (DISC 1 to DISC 10).
❷ The track number is displayed and the required track number is selected using the track button.
- CD play starts.

- To designate track numbers 1 to 10, press the track number button corresponding to the track number.
- To designate track number 11 or higher, press the +10 button the required number of times, then a track number button. (Example: To designate the 20th track, press the +10 button once, then press track number button 10.)

* +10 button:
Each time this button is pressed, the number increases by 10. First press this button to set the 10's digit, then press the track number button to set the 1's digit.

Repeat play (Using the remote control unit)

Press the REPEAT button before or during play. It is possible to perform repeat play of a single track, all tracks on one CD, or all tracks on all CDs in the CD changer.

Each time the REPEAT button is pressed, the mode will change in the order from a single track (⊂), to all tracks (⊂ ALL), to clear mode.

Reproducción por acceso directo (utilizando la unidad de control remoto)

Ejemplo 1: Para seleccionar el disco 1.

❶ Seleccione el CD deseado utilizando el botón CD CONTROL (DISC 1 a DISC 10).
- Se inicia la reproducción de CD.

Ejemplo 2: Para seleccionar la 3ª pista del disco 3.

❶ Seleccione el CD deseado utilizando los botones CD CONTROL (DISC 1 a DISC 10).
❷ Se visualizarán los números de pista, seleccione el número de pista deseada utilizando el botón de pista.
- Se inicia la reproducción del CD.

- Para designar las pistas del número 1 al 10, presione el botón de número de pista correspondiente a la misma.
- Para designar el número de pista 11 o superior, presione el botón +10 el número necesario de veces, y luego un botón de número de pista. (Ejemplo: Para designar la pista 20, presione el botón +10 una vez, y luego presione el botón 10 de número de pista).

* Botón +10:
Cada vez que presiona este botón el número se incrementa en 10. Primero presione este botón para ingresar las decenas, luego presione el botón de número de pista para ingresar las unidades.

Repetición de reproducción (Utilizando la unidad de control remoto)

Presione el botón REPEAT antes o durante la reproducción. Es posible efectuar la repetición de reproducción de una sola pista, todas las pistas de un CD o todas las pistas de todos los CD en el cambiador.

Cada vez que presione el botón REPEAT el modo cambiará en el siguiente orden: de una sola pista (⊂) a todas las pistas (⊂ ALL), al modo de borrado.

直接進出播放（使用遙控器）

例1：指定唱碟 1。

❶ 利用（DISC1－DISC10）的 CD CONTROL 鍵指定 CD。
- 開始 CD 播放。

例2：指定唱碟 3 上的第 3 首樂曲。

❶ 利用（DISC1－DISC10）的 CD CONTROL 鍵指定 CD。
❷ 用樂曲鍵顯示指定樂曲的號碼并選擇想要播放的樂曲號碼。
- 開始 CD 播放。

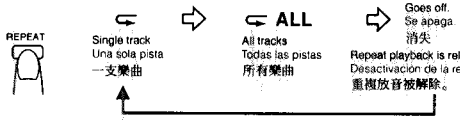
- 根據樂曲號碼，按壓與之相符合的樂曲號碼鍵鈕，以選擇 1 至 10 的樂曲號碼。
- 若要選擇 11 以上的樂曲號碼，根據所要選擇的樂曲號碼的數字按壓 +10 鍵，然後按壓樂曲號碼鍵（譬如，要選擇第 20 號樂曲，先按壓 +10 鍵鈕，然後按壓樂曲號碼鍵 10）。

* +10 鍵：
每按壓一次此鍵，數字便增加 10。先按壓此鍵設定十位數，然後按壓樂曲號碼

重復播放（使用遙控器）

在播放之前或播放期間，按壓重復 REPEAT 鍵。可以進行單曲重復播放或 CD 唱碟上所有樂曲的重復播放或 CD 交換器上所有 CD 上的所有樂曲的重復播放。

每次按下 REPEAT 鍵，播放方式將會按單曲重復方式（⊂），所有樂曲重複方式（⊂ALL）和取消方式的順序進行變換。



- **Single track repeat (⊂)**
The current or specified track will be played repeatedly.
- **All tracks of one CD repeat (⊂ ALL)**
All tracks on the current or specified CD will be played repeatedly.

- **All tracks of all CDs repeat (ALL DISC. CONTINUE. ⊂ ALL)**
When the CONTINUE button is pressed in the "⊂ ALL" mode, CD play starts from the current or specified track, then all tracks on all CDs will be played repeatedly.

Random play (Using the remote control unit)

Press the RANDOM button before or during play. It is possible to perform random play from one or all CDs.

- **One disc random (RANDOM)**
Press the RANDOM button to randomly play tracks on the current or specified CD, except in continuous mode.

- **All disc random (ALL DISC, CONTINUE, RANDOM)**
Press the RANDOM button in continuous play mode to randomly select and play tracks from all of the CDs in the CD changer.

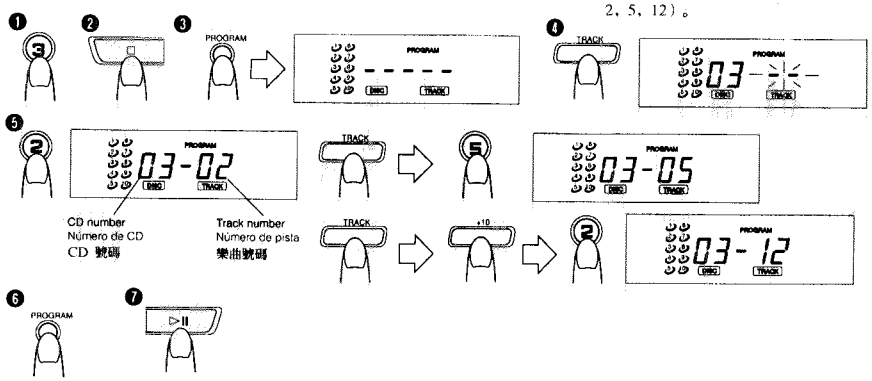
Note:
- It is not a malfunction that a certain track be played back several times during random play.

Programmed play

- Up to 20 tracks can be programmed to be played in any required order from one CD or all CDs in the CD changer.

Example: (CD containing more than 12 tracks)

Example 1: Programming tracks from disc 3 (tracks 2, 5, and 12).



- **Repetición de una sola pista (⊂)**
La pista actual o la especificada será reproducida repetidamente.
- **Repetición de todas las pista de un CD (⊂ ALL)**
Todas las pistas del CD actual o del especificado serán reproducidas repetidamente.

- **Repetición de todas las pistas de todos los CD (ALL DISC. CONTINUE. ⊂ ALL)**
Cuando se presiona el botón CONTINUE estando el modo "⊂ ALL" activado, la unidad inicia la reproducción del CD desde la pista actual o desde la especificada, y luego de todas las pistas de todos los CD son reproducidas repetidamente.

Reproducción aleatoria (Utilizando la unidad de control remoto)

Presione el botón RANDOM antes o durante la reproducción. Es posible ejecutar la reproducción aleatoria de uno o de todos los CD.

- **Un disco aleatorio (RANDOM)**
Presione el botón RANDOM para reproducir aleatoriamente las pistas del CD colocado o de uno especificado, excepto cuando el modo de reproducción continua esté activado.

- **Todos los discos aleatoriamente (ALL DISC, CONTINUE, RANDOM)**
Presione el botón RANDOM en el modo de reproducción continua para seleccionar aleatoriamente y reproducir las pistas de todos los CD en el cambiador.

Nota:
- Que cierta pista sea reproducida varias veces durante la reproducción aleatoria no es una falla.

Reproducción programada

- Es posible programar un máximo de 20 pistas para reproducirlas en cualquier orden deseado, de un CD o de todos los CD en el cambiador.

Ejemplo: (CD conteniendo más de 12 pistas)

Ejemplo 1: Programación de pistas del disco 3 (pistas 2, 5, y 12).

- **單曲重復（⊂）**
重復播放當前樂曲或指定樂曲。
- **重復播放一個 CD 上的所有樂曲（⊂ ALL）**
重復播放當前 CD 或指定 CD 上的所有樂曲。

- **重復播放所有 CD 上的所有樂曲（ALL DISC. CONTINUE. ⊂ALL）**
當在"⊂ALL"方式下按壓 CONTINUE 鍵，CD 將會從當前樂曲或指定樂曲開始播放，然後重復播放所有 CD 上的所有樂曲。

隨機播放（使用遙控器）

在播放之前或播放期間按壓隨機播放（RANDOM）。可以從一個或所有 CD 上開始隨機播放。

- **一個唱碟的隨機播放（RANDOM）**
除連續播放方式之外，按壓 RANDOM 鍵便開始在當前或指定 CD 上隨機播放樂曲。

- **所有唱碟的隨機播放（ALL DISC, CONTINUE, RANDOM）**
在連續播放方式下，按壓隨機播放鍵（RANDOM）便會從 CD 交換器的所有 CD 上隨機選曲來進行播放。

註：
- 在隨機播放期間，如果出現几次重復播放某首樂曲，這不是故障。

編程放音

- 可以對一個 CD 或 CD 交換器內的所有 CD 選取最多 20 首想要播放的樂曲進行編程播放。

例：（CD內有 12 首以上的樂曲）

例1：從唱碟 3 內來編程播放樂曲（樂曲 2、5、12）。

❶ Press the No. 3 CD CONTROL button.
❷ Press the □ button.
❸ Press the PROGRAM button to set to the programming mode.
❹ Press the TRACK button.
❺ Press to designate the required track number (No. 1 to No. 10, and +10).
• Repeat steps ❹ and ❺ to designate the other tracks.
❻ Press the PROGRAM button to confirm program details.
• Repeat from step ❷ to readjust the program.
• Repeat from step ❹ to add to the program.
❼ Press the ▷II button when programming is completed. Programmed play starts.

When using the remote control unit
• After pressing the PROGRAM button by following the procedure above, you can set programmed play using the CD CONTROL and track number buttons.

❶ Presione el botón CD CONTROL No. 3.
❷ Presione el botón □.
❸ Para activar el modo de programación, presione el botón PROGRAM.
❹ Presione el botón TRACK.
❺ Presiónelo para seleccionar el número de pista deseado (No.1 a No.10, y +10).
• Repita los pasos ❹ y ❺ para seleccionar otras pistas.
❻ Presione el botón PROGRAM para confirmar los detalles del programa.
• Repita desde el paso ❷ para reajustar el programa.
• Repita desde el paso ❹ para agregar al programa.
❼ Cuando termine la programación, presione el botón ▷II. Se iniciará la reproducción programada.

Utilizando la unidad de control remoto
• Después de presionar el botón PROGRAM por medio del procedimiento de arriba, usted también puede activar la reproducción programada utilizando los botones CD CONTROL y los de número de pista.

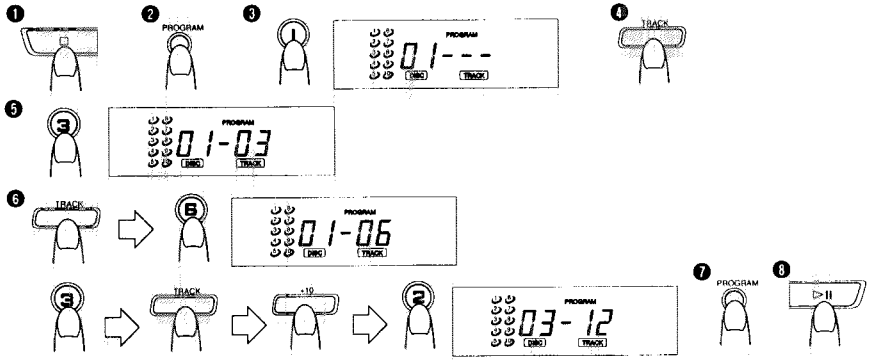
❶ 按壓第3號 CD CONTROL 鍵。
❷ 按壓□鍵。
❸ 按壓 PROGRAM 鍵設定成編程方式。
❹ 按 TRACK 鍵。
❺ 按鍵以指定想要的樂曲號碼（No.1 至 No.10 和 +10）。
• 重複步驟 ❹和 ❺以指定其它樂曲。
❻ 按壓 PROGRAM 鍵確認程序的細節。
• 從第 ❷步開始重複上述操作來調整程序。
• 從第❹步開始重複操作來追加程序。
❼ 當結束編程時按壓▷II鍵。開始編程播放。

當使用遙控器時
•通過執行上述步驟，在按 PROGRAM 鍵之後，您可以使用 CD CONTROL 和樂曲號碼鍵設定編序播放。

• Example 2: Programming tracks from 2 or more CDs in the order of disc 1 (track 3), disc 1 (track 6), and disc 3 (track 12).

• Ejemplo 2: Programación de pistas de 2 o más CD en el siguiente orden: disco 1 (pista 3); disco 1 (pista 6), y disco 3 (pista 12).

• 例 2: 從兩個或更多的 CD 中進行選曲編程，如以唱碟 1（3 首樂曲），唱碟 1（6 首樂曲），和唱碟 3（12 首樂曲）的順序進行編程。



❶ Press the □ button.
❷ Press the PROGRAM button to set to the programming mode.
❸ Designate the required CD using the CD CONTROL buttons (No. 1 to No. 10).
❹ Press the TRACK button.
❺ Press to designate the required track number (No. 1 to No. 10, and +10).
❻ Repeat steps ❸ ❹ and ❺ to designate the other tracks.
❼ Press the PROGRAM button to confirm program details.
• Repeat from step ❶ to readjust the program.
• Repeat from step ❸ to add to the program.
❽ Press the ▷II button when programming is completed. Programmed play starts.

❶ Presione el botón □.
❷ Para activar el modo de programación, presione el botón PROGRAM.
❸ Seleccione el CD deseado utilizando los botones CD CONTROL (No. 1 a No. 10).
❹ Presione el botón TRACK.
❺ Presiónelo para seleccionar el número de pista deseado (No.1 a No.10, y +10).
❻ Repita los pasos ❸ ❹ y ❺ para seleccionar otras pistas.
❼ Presione el botón PROGRAM para confirmar los detalles del programa.
• Repita desde el paso ❶ para reajustar el programa.
• Repita desde el paso ❸ para agregar al programa.
❽ Cuando termine la programación, presione el botón ▷II. Se iniciará la reproducción programada.

❶ 按□鍵。
❷ 按 PROGRAM 鍵設定成編序方式。
❸ 使用 CD CONTROL 鍵（No.1 至 No.10）指定想要的 CD。
❹ 按 TRACK 鍵。
❺ 按鍵以指定想要的樂曲號碼（No.1 至 No.10 和 +10）。
❻ 重複步驟 ❸、❹ 和 ❺ 以指定其它樂曲。
❼ 按 PROGRAM 鍵以確認編序細節。
• 從步驟 ❶ 開始重複以重新調整編序。
• 從步驟 ❸ 開始重複以增加編序。
❽ 在編序完成後按▷II鍵。開始編序播放。

To confirm the details of a program...
Press the PROGRAM button in stop mode: the tracks making up the program will be displayed in programmed order.

To clear the programmed tracks...
Press the □ button before playing a CD. During programmed play, press this button twice. When the CD tray is opened, programmed tracks are cleared automatically.

Para confirmar los detalles de un programa ...
Presione el botón PROGRAM en el modo de parada: las pistas que componen el programa aparecerán indicadas en el orden programado.

Para borrar las pistas programadas...
Presione el botón □ una vez antes de reproducir el CD. Durante la reproducción programada, presione este botón dos veces. Cuando el portadisco de CD está abierto, las pistas programadas son automáticamente canceladas.

確認程序的細節…
在停止方式下按壓 PROGRAM 鍵：被編程的樂曲將會按編程的順序被顯示出來。

清除被編程的樂曲…
在開始播放 CD 之前按壓□鍵。在編程播放期間，兩次按壓此鍵。
當 CD 托盤打開時，編序樂曲自動清除。

HANDLING CASSETTE TAPES

Cassette tapes
1. Loose tape may cause trouble. Using a pencil or like object, gently tighten the tape as shown.
2. To prevent recordings from being erased accidentally, remove the tab(s) with a screwdriver, etc. Reseal the slots with adhesive tape to erase and re-record after the tabs have been removed.
3. C-120 cassettes are not recommended because they are prone to malfunction.

Cassette loading
1. Press the ■/▲ STOP/EJECT button to open the cassette holder.
2. Load a cassette as shown.
3. Close the cassette holder by pressing it gently. Listen for the click indicating that the holder is securely shut.

MANIPULACION DE CASSETTES DE CINTA

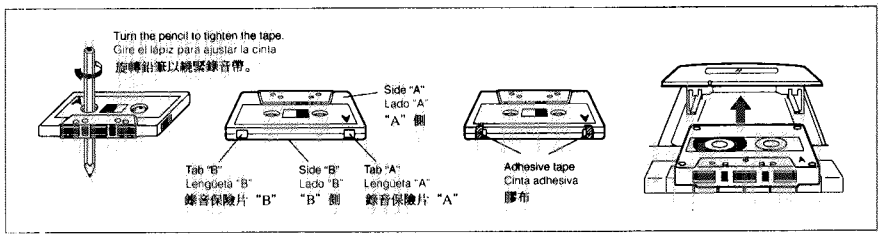
Cassettes de cinta
1. La cinta floja puede causar problemas. Utilice un lápiz o un objeto similar y tensione gentilmente la cinta tal como se muestra.
2. Para evitar borrar grabaciones accidentalmente, extraiga la/s lengüeta/s con un destornillador, etc. Para borrar la cinta después de haber extraído las lengüetas, selle las ranuras con cinta adhesiva.
3. No se recomienda el uso de cassettes C-120 porque tienen tendencia a fallar.

Colocación de cassettes
1. Presione el botón ■/▲ STOP/EJECT para abrir el portacassette.
2. Extraiga el cassette como se muestra.
3. Cierre el portacassette presionándolo suavemente. Cuando oiga un "clic" ello indica que el portacassette está correctamente cerrado.

有關卡式錄音帶

卡式錄音帶
1. 鬆散的錄音帶會引起麻煩的事情。用鉛筆或類似的物品，如圖所示慢慢地旋緊錄音帶。
2. 為預防意外地抹消您所需要的錄音內容，請用螺絲刀將錄音保險片拆掉。當錄音保險片拆掉以後，若要抹銷錄音內容或者重新錄音，可用膠布將開孔封住。
3. 我們建議您不要使用 C-120 的錄音帶，因為這容易造成故障。

錄音帶的裝入
1. 按壓 ■/▲ STOP/EJECT 鍵來打開錄音帶艙。
2. 按照下圖所示裝入錄音帶。
3. 輕輕地按壓便可關閉錄音帶艙。當您聽到了"卡塔"聲，就說明錄音帶艙關好了。



CASSETTE PLAYBACK — REPRODUCCION DE CASSETTES — 卡式錄音帶的放音

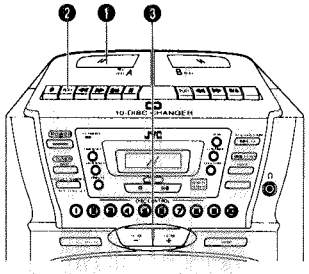
Operate in the order shown

❶ Load a cassette tape with side A facing up.
❷ Press to start playback. (The power is switched on and the TAPE mode is engaged to start tape playback.)
- When battery power is used, switch on the POWER button first, then perform operations.

❸ Adjust.

Notes:
- When the power is turned off while the tape is still running, cassette operation buttons which are depressed do not return to their original positions.
  Press the ■/▲ STOP/EJECT button to stop the tape running before turning off the power.
- Avoid operating the FF or REW button on the deck during playback of the other deck.

Opere en el orden mostrado



❶ Coloque un cassette con la cara A apuntando hacia arriba.
❷ Presiónelo para iniciar la reproducción. (Se conecta la alimentación y se activa el modo TAPE para iniciar la reproducción de la cinta).
- Cuando se utiliza la alimentación de la pila, primero conecte ON el botón POWER, y efectúe las operaciones después.

❸ Ajuste.

Notas:
- Si se desconecta la alimentación mientras la cinta está girando, los botones de operación del cassette presionados no vuelven a su posición original.
  Presione el botón ■/▲ STOP/EJECT para detener la cinta antes de desconectar la alimentación.
- Evite presionar el botón FF o REW de una platina mientras la otra está reproduciendo.

按照下列順序操作

❶ 將A面朝上，裝入一盤卡式錄音帶。
❷ 按壓鍵以開始放音（接通電源，進入TAPE狀態，開始錄音帶的放音）。
- 使用電池時，首先接通電源開關。然後操作。

❸ 調節。

註：
- 如果在走帶中切斷電源，按壓過的卡式錄音帶操作鍵鈕不會回到原位置。
  請在切斷電源之前先按壓■/▲STOP/EJECT鍵鈕停止走帶。
- 當另一個卡座在播放時，避免 FF 或 REW 的操作。

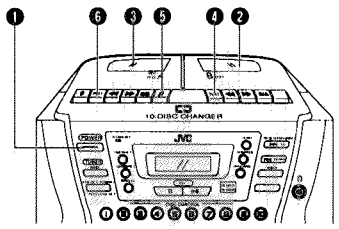
RELAY PLAYBACK (FROM DECK B TO DECK A) — REPRODUCCION POR RELEVO (DE LA PLATINA B A LA PLATINA A) — 接連播放（從 B 卡座到 A 卡座）

Operate in the order shown

❶ Set the POWER button to ON.
❷ Load a cassette.
❸ Load another cassette.
❹ Press the [1] PLAY ► button on Deck B.
❺ Press the [2] II PAUSE button.
❻ Press the [3] PLAY ► button on Deck A.

- When Deck B stops, Deck A's pause mode will be released and it will start playback. When Deck A stops automatically, relay playback will be released.

Opere en el orden mostrado



❶ Coloque el botón POWER en ON.
❷ Coloque un cassette.
❸ Coloque otro cassette.
❹ Presione el botón [1] PLAY ► en la platina B.
❺ Presione el botón [2] II PAUSE.
❻ Presione el botón [3] PLAY ► en la platina A.

- Cuando la platina B para, el modo de pausa de la platina A es desactivado y se inicia la reproducción. Cuando la platina A para automáticamente, se desactiva la reproducción alternada.

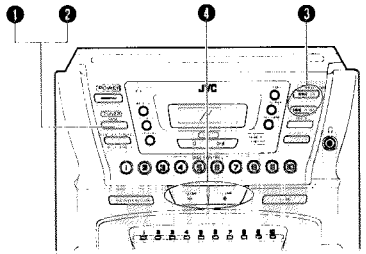
按照下列順序操作

❶ 將 POWER 鍵設置成 ON。
❷ 裝入磁帶。
❸ 裝入另一盒磁帶。
❹ 按 B 卡座上的 [1] PLAY►鍵
❺ 按 [2] IIPAUSE 鍵。
❻ 按 A 卡座上的 [3] PLAY►鍵

- 當 B 卡座停止時，A 卡座的暫停模式即被取消並開始播放。當 A 卡座自動停止時，接連播放即結束。

RADIO RECEPTION — RADIORRECEPCION — 無線電廣播的接收

Operate in the order shown



❶ Press the TUNER/BAND button.
- The power is switched on and a band and radio frequency will be shown in the display.
- When battery power is used, switch on the POWER button first, then perform operations.

❷ Select the band.
❸ Tune to the required station.
❹ Adjust.

STEREO AUTO/MONO button (using the remote control unit)

Auto mode:
Set to this position when listening to or recording an FM stereo broadcast. The STEREO indicator lights when the FM stereo broadcast is received.

MONO:
Set to this position when FM stereo reception is noisy.
When another station is tuned to in the MONO mode, the unit automatically enters Auto mode.

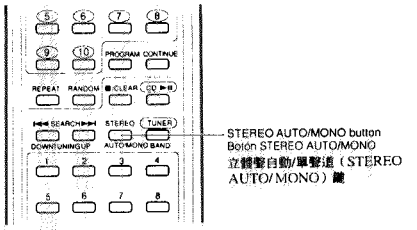
Seek tuning

Press the UP or DOWN button for one second or more. The unit enters the seek tuning mode to tune in the nearest station automatically, so the broadcast can be heard.

Manual tuning

Each time the UP or DOWN button is pressed, the unit steps through the current frequency band. Tuning is done in steps of 100 kHz/50 kHz for FM, 10 kHz/9 kHz for AM and 5 kHz for SW.

Opere en el orden mostrado



❶ Presione el botón TUNER/BAND.
- Se conecta la alimentación y aparecerán el visor una banda y una frecuencia de radio.
- Cuando se utiliza la alimentación de la pila, primero conecte ON el botón POWER, y efectúe las operaciones después.

❷ Seleccione la banda.
❸ Sintonice la estación deseada.
❹ Ajuste.

Botón STEREO AUTO/MONO (utilizando la unidad de control remoto)

Modo automático:
Colóquelo en esta posición cuando escucha o graba una radiodifusión estereofónica de FM. El indicador STEREO se enciende cuando se recibe una radiodifusión estereofónica de FM.

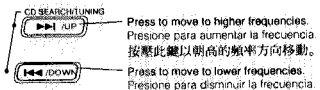
MONO:
Colóquelo en esta posición cuando la recepción estereofónica de FM tenga ruido.
Si se sintoniza otra estación en el modo MONO, la unidad ingresa automáticamente en el modo automático.

Sintonización búsqueda

Presione el botón UP o DOWN durante un segundo o más. La unidad ingresa en el modo de búsqueda de sintonía, sintonizando automáticamente la estación más próxima, escuchándose la radiodifusión.

Sintonización manual

Cada vez que se presiona el botón UP o DOWN, la unidad pasa a través de la banda de frecuencia actual. La sintonización es efectuada en pasos de 100 kHz/50 kHz para FM, de 10 kHz/9 kHz para AM, y 5 kHz para OC.



按照下列順序操作

❶ 按壓 TUNER/BAND 鍵。
- 電源便被接通，波段以及廣播頻率被顯示出來。
- 使用電池時，首先接通電源開關。然後操作。

❷ 選擇波段。
❸ 調諧出您所想聽的電臺。
❹ 調節。

立體聲 自動/單聲道（STEREO AUTO/MONO）鍵（使用遙控器）

自動方式：
若要收聽或者收錄 FM 立體聲廣播，可設於此位置。當收到 FM 立體聲廣播時，STEREO 指示燈便會點亮。

MONO:
FM立體聲接收噪音過大時，請設定於此位置。
當用單聲道方式（MONO）調入其它的電臺時，本機則自動轉入自動方式。

搜尋調諧
按壓 UP 或 DOWN 鍵一秒鐘或一秒鐘以上。裝置便進入選臺調諧方式並自動調諧到最近的一個電臺上，這樣便能聽到廣播。

手動調諧
每接一次 UP 或 DOWN 鍵，便會跳過正在收聽的頻率波段。FM、AM 和 SW 的跳越頻寬分別爲 100 kHz/50 kHz、10 kHz/9 kHz 和 5 kHz。

Notes:
- When seek tuning to the required station is not possible because the broadcast signal is too weak, press the UP or DOWN button momentarily to perform manual tuning.
- When the power is set to STANDBY, or another mode (TAPE or CD) is selected, the last tuned frequency is stored in memory. When the power is switched on again and TUNER/BAND button is pressed, the same station will be tuned to.

Notas:
- Cuando la búsqueda de sintonía de la estación deseada no es posible porque la señal de radiodifusión es demasiado débil, presione el botón UP o DOWN por un momento para efectuar la sintonización manual.
- Cuando se coloca la alimentación en STANDBY, u otro modo (TAPE o CD), la última frecuencia sintonizada queda almacenada en memoria. Cuando conecta la alimentación otra vez y presiona el botón TUNER/BAND, la unidad sintoniza la misma estación.

註：
- 當由於廣播電臺的信號太弱不能找到希望的電臺時，請短促地按壓 UP 或 DOWN 鍵來進行手動調諧。
- 當將電源鍵設於 STANDBY（待機）方式，或設於其他方式（TAPE 或 CD）時，最後所收聽的電臺的頻率便被儲存於記憶裝置中。當再次接通電源，和按壓 TUNER/BAND 鍵時，將會收聽到同一電臺。

Auto preset tuning

This function scans the current band, detecting frequencies used to broadcast signals, and stores the first 15 frequencies in memory automatically.
- Press the AUTO PRESET button for more than 2 seconds. The frequencies of stations broadcasting signals can be stored in memory automatically in the order of increasing frequency. (15 stations in each band.)

Sintonización programada automática

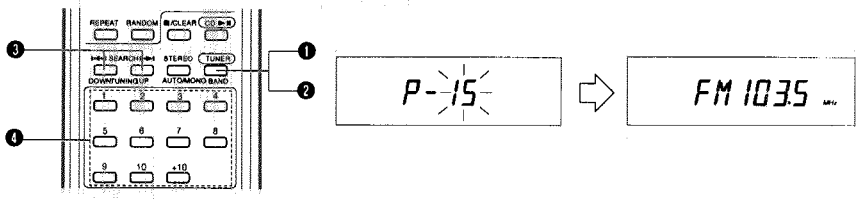
Esta función busca la banda actual, detectando frecuencias usadas para señales de radiodifusión y almacena automáticamente en memoria las primeras 15 frecuencias.
- Presione el botón AUTO PRESET durante más de 2 segundos. Las frecuencias de las emisoras emitiendo señales de radiodifusión pueden ser almacenadas en memoria automáticamente en orden de frecuencia creciente (15 estaciones en cada banda).

自動預設調諧

此功能根據廣播信號的頻率，來搜尋正在播放的波段，並且，自動地將前面的 15 個電臺頻率儲存於記憶裝置。
- 按壓 AUTO PRESET 鍵 2 秒鐘以上。廣播電臺的頻率將會按頻率增加的順序自動存儲在記憶中。（各頻道爲 15 個電臺）

Presetting stations (using the remote control unit)

15 stations in each band can be preset as follows:
- Example: (Presetting an FM station broadcasting on 103.5 MHz to preset button "15")



❶ Press the TUNER/BAND button.
❷ Select the FM band using the TUNER/BAND button.
❸ Tune to the required station.
❹ Press preset button "+10", then "5" for more than 2 sec.
(When "15" blinks in the preset station display, the station has been stored.)

- Repeat the above procedure for each of the other stations, using a different preset button each time.
- Repeat the above procedure for the other band.

- **To change preset stations**
Perform step ❹ above after tuning to the required station.

Notes:
- The previous stored station is erased when a new station is stored, because the new station's frequency replaces the previous frequency in memory.
- When listening to an AM broadcast, noise may be heard if the remote control unit is used.

Presintonización de estaciones (utilizando la unidad de control remoto)

Es posible presintonizar 15 estaciones en cada banda de la siguiente forma:
- Ejemplo: (Presintonización de la radioemisión de una estación de FM en 103,5 MHz en el botón "15" de presintonización)

❶ Presione el botón TUNER/BAND.
❷ Seleccione la banda de FM utilizando el botón TUNER/BAND.
❸ Sintonice la estación deseada.
❹ Presione el botón "+10" de presintonización y luego el "5" durante más de 2 segundos. (Cuando el "15" parpadea en la indicación de estación presintonizada, ésta ha sido registrada).

- Repita el procedimiento de arriba para cada una de las otras estaciones, utilizando un botón de presintonización diferente para cada estación.
- Repita el procedimiento de arriba para la otra banda.

- **Cambio de estaciones presintonizadas**
Ejecute el paso ❹ de arriba después de sintonizar la estación deseada.

Notas:
- Cuando se almacena una nueva estación, se borra la estación almacenada anteriormente porque la frecuencia de la nueva estación reemplaza la frecuencia de la anterior en memoria.
- Cuando escuche una radiodifusión de AM, es posible que escuche interferencia si utiliza el mando a distancia.

預設電臺（使用遙控器）

按照下面所示的順序，各波段可以預設 15 個電臺：
- 例：（將 FM 103.5MHz 電臺預設於號碼鍵 "15"）

❶ 按壓 TUNER/BAND 鍵。
❷ 用 TUNER/BAND 鍵選擇 FM 波段。
❸ 調諧出您所需要的電臺。
❹ 按預設鍵 "+10" 後，再按號碼鍵 "5" 兩秒鐘以上。
（如果預設電臺顯示中有 "15" 在閃爍，說明該電臺已經被存儲完畢。）

- 重複上述步驟，預設其它各個電臺。
- 其它波段的預設也與上述步驟相同。

- **若要更改預設電臺**
調諧出所需要的電臺以後，作上述第❹步的操作。

註：
- 因爲新電臺的頻率將會在記憶體內取代以前的電臺頻率，所以當存儲進新的電臺時，以前存儲的電臺將會被消掉。
- 在收聽 AM 廣播時，如果使用遙控器，那麼，有可能會有噪音。

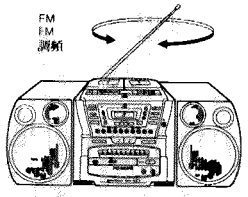
Preset tuning

- The stations must be preset before this operation can be performed.

(Using the main unit)
① Press the TUNER/BAND button.
② Select the band using the TUNER/BAND button.
③ Press the PRESET TUNING button to select the required preset station.

(Using the remote control unit)
① Press the TUNER/BAND button.
② Select the band using the TUNER/BAND button.
③ Press the required preset station buttons (No. 1 - No. 10 and +10).
- The preset station number and frequency corresponding to the button pressed are shown.

Using the antennas



Note:
The built-in ferrite core antenna can pick up interference from television receivers in the neighborhood and thereby disturb AM and SW receptions.

To Change the Channel Space Mode

When this unit is shipped, the channel space mode is set to **(AM-9 kHz)**.
Set it to **(AM-10 kHz)**, if the unit is to be used in North or South America. (This enables 10 kHz increment steps in AM frequencies and 100 kHz increment steps in FM frequencies.)

How To Operate (using the main unit)
Set the POWER button to ON while pressing the TUNING UP button. Keep pressing the buttons till **(AM-10 kHz)** is shown in the display window.

- To change back to the original mode, set the POWER button to ON while pressing the TUNING DOWN button. Keep pressing the buttons till **(AM-9 kHz)** is shown in the display window.

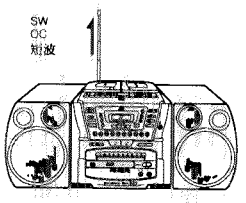
Presintonización

- Las estaciones deben ser presintonizadas antes de que se pueda ejecutar esta operación.

(Utilizando la unidad principal)
① Presione el botón TUNER/BAND.
② Seleccione la banda utilizando el botón TUNER/BAND.
③ Presione el botón PRESET TUNING para seleccionar la estación presintonizada deseada.

(Utilizando la unidad de control remoto)
① Presione el botón TUNER/BAND.
② Seleccione la banda utilizando el botón TUNER/BAND.
③ Presione los botones (No. 1 - No. 10 y +10) de la estación presintonizada deseada.
- En el visor aparecen el número de estación presintonizada y la frecuencia correspondiente al botón presionado.

Utilización de antenas



Nota:
El núcleo incorporado de la antena de ferrita puede captar interferencia de receptores de televisión de la vecindad y disturbando la recepción de AM y OC.

Cambio del modo de espaciamiento entre canales

El modo de espaciamiento entre canales está fijado en **(AM-9 kHz)** en fábrica.
Ajústelo en **(AM-10 kHz)** si utiliza la unidad en América del Notre o del Sur. (Esto le permite pasos con incrementos de 10 kHz en frecuencias de AM y con incrementos de 100 kHz para las frecuencias de FM.)

Cómo realizar el cambio (utilizando la unidad principal)
Coloque el botón POWER en ON mientras presiona el botón de TUNING UP. Mantenga presionados los botones hasta que aparezca **(AM-10 kHz)** en el visor de indicación.

- Para regresar al modo original, coloque el botón POWER en ON mientras presiona el botón de TUNING DOWN. Mantenga presionados los botones hasta que aparezca **(AM-9 kHz)** en el visor de indicación.

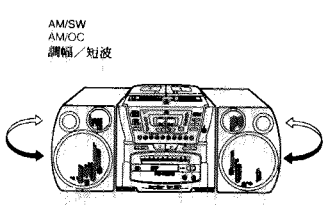
預設調諧

- 在進行操作之前必須預設電台。

（使用主機）
① 按壓 TUNER/BAND 鍵。
② 用 TUNER/BAND 鍵選擇希望的波段。
③ 按壓 PRESET TUNING 鍵選擇希望的電臺。

（使用遙控器）
① 按壓 TUNER/BAND 鍵。
② 用 TUNER/BAND 鍵選擇希望的波段。
③ 按所需的預設電台鍵（No.1 至 No.10 和 +10）。
- 將顯示出對應於按下的鍵鈕的預設電台和頻率。

使用天線



註：
內藏式磁芯天線從傍邊的電視接收機拾起雜音而干擾 AM 和 SW 的接收。

若要更改頻道間隔方式

本機在出廠的時候，頻道位置功能被設於（**AM-9 kHz**）。
如果在北美洲或南美洲使用本機，請將其設於（**AM-10 kHz**）。（這可以使 AM 波段的頻率按增加 10 kHz，FM 波段的頻率增加 100 kHz。）

操作方法（使用主機）
按著 TUNING UP 鍵鈕的同時，按壓 POWER 鍵鈕接通電源。按壓鍵鈕不放，直至（**AM-10 kHz**）出現在顯示窗上。

- 要變回原模態時，按著 TUNING DOWN 鍵鈕的同時，按壓 POWER 鍵鈕接通電源。按壓鍵鈕不放，直至（**AM-9 kHz**）出現在顯示窗上。

RECORDING

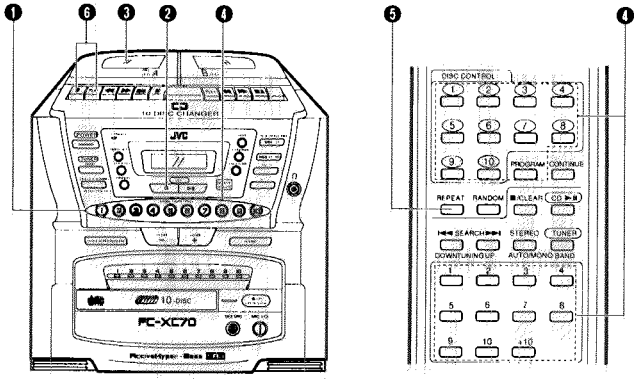
- During recording, the ALC (Automatic Level Control) circuit automatically optimizes the recording level, so manual recording level adjustment is unnecessary.
- Check that the safety tab on the cassette tape is not broken off.
- When making an important recording, use household AC as much as possible for power supply.

Note:
This unit has recording/playback characteristics suitable for normal tapes. Normal tapes have different characteristics from CrO_2 and metal tapes.

Synchronized recording with the CD player

- In this system, the CD player starts play when the cassette deck enters the recording mode.

Operate in the order shown



1. Press the CD CONTROL button corresponding to the CD to be recorded.
2. Press the □ button to set to the stop mode.
3. Load a cassette with side A facing up. (Wind past the tape leader before starting recording.)
4. When programmed play is required, program the required tracks. (See page 26.)
   - Select tracks with a total playing time which does not exceed the tape length (refer to the liner notes).
5. When recording a CD in repeat play mode, set as required.
6. Press the ○ REC button and the ▶ PLAY button; synchronized recording will start. (The recording indicator lights up.)

GRABACION

- Durante la grabación, el circuito ALC (control automático de nivel), optimiza automáticamente el nivel de grabación, haciendo innecesario el ajuste manual del nivel de grabación.
- Verifique que la lengüeta de seguridad del cassette de cinta no esté rota.
- Cuando efectúe una grabación importante, utilice tanto como sea posible la CA del hogar para alimentación.

Nota:
Esta unidad tiene características de grabación/reproducción adecuadas para cintas normales. Las cintas normales tienen diferentes características que las cintas de CrO_2 y de metal.

Grabación sincronizada con el reproductor de CD

- En este sistema el reproductor de CD inicia la reproducción cuando la platina de cassette ingresa en el modo de grabación.

Opere en el orden mostrado

1. Presione el botón CD CONTROL correspondiente al CD que va a grabar.
2. Presione el botón □ para activar el modo de parada.
3. Coloque un cassette con el lado A apuntando hacia arriba. (Antes de iniciar la grabación, bobine la cinta hasta el fin del segmento que no puede ser grabado).
4. Cuando desea la reproducción programada, programe las pistas deseadas. (Ver página 26).
   - Seleccione las pistas con un tiempo total de reproducción que no exceda la longitud de la cinta (refiérase a las notas en la envoltura).
5. Cuando graba un CD en el modo de reproducción repetida, ajuste como sea necesario.
6. Presione el botón ○ REC y el botón ▶ PLAY, se iniciará la grabación sincronizada. (Se enciende la luz indicadora de grabación).

錄音

- 在錄音期間，ALC（自動電平控制）電路會將錄音電平調節到最佳水平，因此不需要進行手動錄音電平調節。
- 檢查卡式錄音帶上的錄音保險片是否在。
- 在進行重要的錄音時，請盡量使用家用交流電源。

註：
本機具備適於普通錄音帶的錄音／放音特性。普通錄音帶的錄音特性與 CrO_2 錄音帶以及金屬錄音帶的不同。

用 CD 唱機進行同步錄音

- 在該系統中，當卡式座進入錄音狀態時，CD 唱機便開始放音。

按照下列順序操作

1. 按壓對應於希望錄音的 CD 的 CD CONTROL 鍵。
2. 按壓 □ 鍵來設定成停止方式。
3. 裝入一盤卡式錄音帶，讓其 A 面朝外（在開始錄音之前，將錄音帶導入部份繞過去）。
4. 若需要編序放音，請使用遙控器編序（參看 P.26）。
   - 根據不超過磁帶長度的總播放時間來選擇樂曲。（參看唱片封套上之文字說明）
5. 在重複播放方式下對 CD 進行錄音，按照要求進行設定。
6. 同時按壓 ○ REC 鍵鈕與 ▶ PLAY 鍵鈕；同步錄音便開始進行。（錄音指示燈點亮。）

- Non-recorded sections of approx. 4 seconds are automatically left between tunes.
- When the tape reaches the end first, the CD player stops automatically; when the CD player stops first, the tape continues running. In this case, press the ■/▲ STOP/EJECT button to stop the tape.
- Before CD synchro recording of CD continuous play, press the CONTINUE button. (See page 23.)

Notes:
- During CD synchro recording, the ▷II and (I◀◀, ▶▶I) buttons do not function.
- During CD synchro recording, do not perform operations on Deck B, because if the tape in Deck B is played back, that sound would be recorded.

When non-recorded section between tunes is not required...
Perform the following after finishing the previous operation (❶ to ❺).
① Press the ▷II button of the CD player twice. The CD player enters the pause mode.
② Press the ○ REC and ▶ PLAY buttons. Now, the CD player starts play simultaneously.

Notes:
- Depending on the CD used, non-recorded sections of different lengths may be left between tunes.
- When CD synchro recording is performed using more than two CDs, there will be a little blank space while the CDs change.

- En la cinta quedan automáticamente sin grabar secciones de 4 segundos aprox..
- Cuando la cinta llega al fin, el reproductor de CD para automáticamente; cuando el reproductor de CD para primero, la cinta continúa girando. En este caso, presione el botón ■/▲ STOP/EJECT para detener la cinta.
- Antes de la grabación sincronizada de CD con reproducción continuada de CD, presione el botón CONTINUE. (Ver página 23).

Notas:
- Durante la grabación sincronizada de CD los botones ▷II y (I◀◀, ▶▶I) no funcionan.
- Durante la grabación sincronizada de CD, no efectúe las operaciones en la platina B, ya que si la cinta en la misma está siendo reproducida y el sonido puede ser grabado.

Cuando no es necesario dejar espacios sin grabar entre músicas...
Efectúe lo siguiente después de terminar la operación anterior (❶ a ❺).
① Presione dos veces el botón ▷II del reproductor de CD. El reproductor ingresa en el modo de pausa.
② Presione los botones ○ REC y ▶ PLAY. Ahora el reproductor de CD inicia la reproducción simultáneamente.

Notas:
- Dependiendo del CD utilizado es posible dejar entre músicas secciones sin grabar de diferentes longitudes.
- Cuando se efectúa la grabación sincronizada de CD utilizando más de dos discos, quedará un pequeño espacio sin grabar mientras los CD cambian.

- 在樂曲之間會自動留出約4秒鐘左右的空白處。
- 錄音帶先走到頭時，CD 唱機將自動停止；CD 唱機先停止時，錄音帶將繼續走帶。這時，請按壓 ■/▲ STOP/EJECT 鍵鈕停止走帶。
- 在 CD 連續播放的 CD 同步錄音之前，按壓 CONTINUE 鍵。（參看第23頁）。

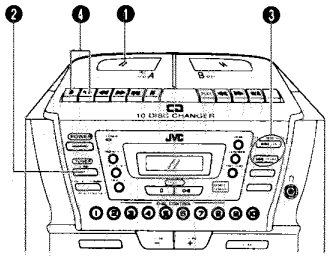
註：
- 同步錄音時，▷II和（I◀◀,▶▶I）鍵不起作用。
- 在 CD 同步錄音時，請勿在 B 卡座上操作。因為倘若 B 卡座中的磁帶一旦播放，其聲音會被錄下來。

當不需要樂曲之間的空白處時…
在完成上述操作（❶至❺）後，進行下列操作。
①按壓兩次 CD 唱機的 ▷II 鍵鈕。CD 唱機進入暫停模態。
②按壓○REC 與 ▶PLAY 鍵鈕。這時，CD 唱機便同時開始放音。

註：
- 根據使用的唱片，樂曲之間可能留有一定的間隔。
- 當使用兩張以上的 CD 來進行 CD 同步錄音時，在 CD 變換時會有一小段空白錄音。

Recording from the radio

Operate in the order shown



❶ Load a cassette.
❷ Press the TUNER/BAND button.
❸ Tune to the required station.
❹ Press the ○ REC button with the ► PLAY button.

- To stop recording temporarily, press the ❚❚ PAUSE button. To resume recording, press the ❚❚ PAUSE button again.
- During recording, do not perform operations on Deck B, because if the tape in Deck B is played back, that sound would also be recorded.

Erasing

A recorded tape can be erased by recording new material over the previous material.

To erase a tape without making a new recording...
Press the ► PLAY button of the deck to set to the TAPE mode and press the ○ REC and ► PLAY buttons together after pressing the ■/▲ STOP/EJECT button.

It may be unlawful to record or playback copyrighted material without the consent of the copyright owner.

Grabación desde la radio

Opere en el orden mostrado

❶ Coloque un cassette.
❷ Presione el botón TUNER/BAND.
❸ Sintonice la estación deseada.
❹ Presione el botón ○ REC conjuntamente con el botón ► PLAY.

- Para parar la grabación temporariamente, presione el botón ❚❚ PAUSE. Para continuar la grabación, presione otra vez el botón ❚❚ PAUSE.
- Durante la grabación no realice las operaciones en la platina B ya que si la cinta en la misma está siendo reproducida, el sonido también será grabado.

Borrado

La cinta grabada puede ser borrada grabando otro material sobre el material anterior.

Para borrar la cinta sin efectuar una nueva grabación...
Presione el botón ► PLAY de la platina para activar el modo TAPE y presione conjuntamente los botones ○ REC y ► PLAY después de presionar el botón ■/▲ STOP/EJECT.

Puede ser ilegal el grabar o reproducir material con derechos de autor sin el consentimiento del dueño de los mismos.

無線電廣播的錄音

按照下列順序操作

❶ 裝入一盤卡式錄音帶。
❷ 按壓 TUNER/BAND 按鍵。
❸ 調至想要的電台。
❹ 同時按壓 ○ REC 按鍵與 ► PLAY 按鍵。

- 要暫時停止錄音，按壓 ❚❚ PAUSE 鍵。要恢復錄音，再按壓一次 ❚❚ PAUSE 即可。
- 錄音時請勿在 B 卡座上操作。因爲倘若 B 卡座中的磁帶一旦播放，其聲音會被錄下來。

抹音

通過在以前的錄音上面錄制新的錄音來消去已錄錄音帶上的錄音。

要不進行新的錄音而抹消錄音帶上的錄音時…

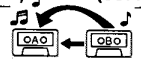
按卡座的 ► PLAY 鍵以設置成 TAPE 狀態，並在按 ■/▲ STOP/EJECT 鍵後同時按 ○ REC 鍵和 ► PLAY 鍵。

未經版權所有者的許可而錄製或播放受版權法保護的音響資料，可能會觸犯法規。

TAPE DUBBING (SYNCHRO START DUBBING)

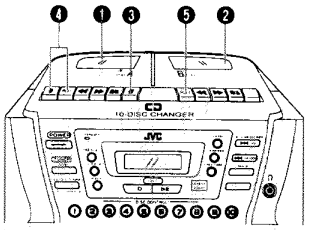
COPIA DE CINTA (COPIA CON INICIO SINCRONIZADO)

複製磁帶（同步開始複製）



Normal-speed dubbing from Deck B to Deck A can be performed.

Operate in the order shown



❶ Load a cassette for recording. (Refer to the note on page 33.)
❷ Load a recorded cassette.
- Lightly press the ► PLAY button to set to the TAPE mode. (The button should not be locked.)

❸ Press the ❚❚ PAUSE button.
❹ Press the ○ REC and ► PLAY buttons together. (Record-pause mode.)
❺ Press the ► PLAY button. (Synchronized dubbing will start.)

Note:
- With Deck A in the record-pause mode, the ❚❚ PAUSE button is released when Deck B enters the stop mode.

Es posible copiar de la platina B a la platina A a velocidad normal.

Opere en el orden mostrado

❶ Coloque un cassette para grabación. (Refiérase a la nota en la página 33.)
❷ Coloque un cassette para grabar.
- Presione levemente el botón ► PLAY para activar el modo cinta (TAPE). (El botón no debe quedar bloqueado).

❸ Presione el botón ❚❚ PAUSE.
❹ Presione conjuntamente los botones ○ REC y ► PLAY. (Modo de pausa de grabación)
❺ Presione el botón ► PLAY. (Se iniciará la copia sincronizada).

Nota:
- Cuando la platina A está en el modo de pausa de grabación y la platina B entra en el modo de parada, el botón ❚❚ PAUSE se desactiva.

本機可以進行普通速度的複製（從 B 卡座到 A 卡座）

按照下列順序操作

❶ 裝入一盒用於錄音的磁帶。（參閱第 33 頁上的“註”。）
❷ 裝入一盒已錄音的磁帶。
- 輕按 ► PLAY 鍵設置成 TAPE 模式。（該鍵不應被鎖住。）

❸ 按 ❚❚ PAUSE 鍵。
❹ 同時按 ○ REC 鍵和 ► PLAY 鍵。（錄音暫停模式。）
❺ 按 ► PLAY 鍵。（同步複製開始。）

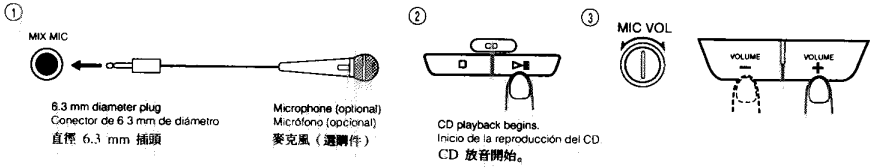
註：
- 當 A 卡座處於錄音暫停模式時，若 B 卡座進入停止模式，則 ❚❚ PAUSE 鍵彈起。

MICROPHONE MIXING

MEZCLADO DE MICROFONO

麥克風混聲

Microphone sound can be mixed with the source sound.



- Example of microphone mixing with CD sound

Operations
① Connect a microphone to the MIX MIC jack. (If there is a switch on the microphone, switch it on.)
② Select the source sound (CD/TAPE/TUNER).
- Play back the source sound selected.

③ Adjust the MIC VOL control and main VOLUME controls.

El sonido del micrófono puede ser mezclado con la fuente de sonido.

- Ejemplo de mezclado de micrófono con el sonido del CD

Operaciones
① Conecte el micrófono con el jack MIX MIC utilizando un conector. (Si el micrófono tiene un interruptor, colóquelo en ON).
② Seleccione la fuente de sonido (CD/TAPE/TUNER).
- Reproduzca la fuente de sonido seleccionada.

③ Ajuste el control MIC VOL y el control principal VOLUME.

麥克風的聲音可以與聲源的聲音混合起來。

- 例：將麥克風和 CD 的聲音混合。

操作
① 將帶有插頭的麥克風接至 MIX MIC 插孔。（如果麥克風上有開關，請打開開關。）
② 選擇聲源（CD/ TAPE/ TUNER）。
- 播放您所選擇的聲源。

③ 調節 MIC VOL 控制與主機上的 VOLUME 控制。

- **To record the mixed sound**
  In order to record this mixed sound onto a tape in the deck, press the ○ REC button with the ► PLAY button.

Notes:
- Use the microphone as far away the set as possible. When the microphone is to near the speakers, howling may occur.
- Disconnect the microphone from the MIX MIC jack after use.

- **Grabación de un sonido mezclado**
  Para grabar el sonido mezclado en una cinta de la platina, presione el botón ○ REC con el botón ► PLAY.

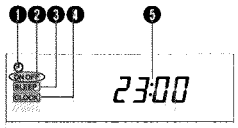
Notas:
- Utilice el micrófono lo más lejos posible de la unidad. Cuando el micrófono está cerca de los altavoces pueden producirse aullidos.
- Después de utilizarlo, desconecte el jack de mezcla de micrófono (MIX MIC).

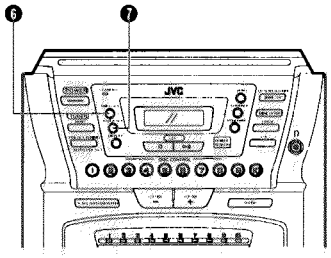
- **若要錄制混響聲音**
  若要將這個混響聲音錄制到錄音帶上，請同時按壓 ○ REC 鍵鈕與 ► PLAY 鍵鈕。

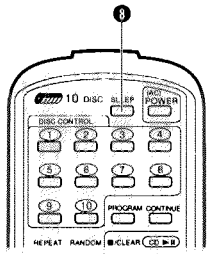
註：
- 使用麥克風的時候，盡可能離設備遠點，如果離揚聲器太近，會引起嘯聲。
- 使用結束後，請將麥克風的插頭從 MIX MIC（混聲麥克風）微型插孔中拔出。

CLOCK ADJUSTMENT — AJUSTE DEL RELOJ — 時鐘的調節

Names of parts in the clock/timer section, and their functions:







❶ Timer mode indicator
❷ Timer indicator (ON/OFF)
❸ SLEEP indicator
❹ CLOCK indicator
❺ Time display
❻ TIMER/SET button
❼ CLOCK/SET button
❽ SLEEP button

Nombre de las parte de la sección del reloj/ temporizador y sus funciones:

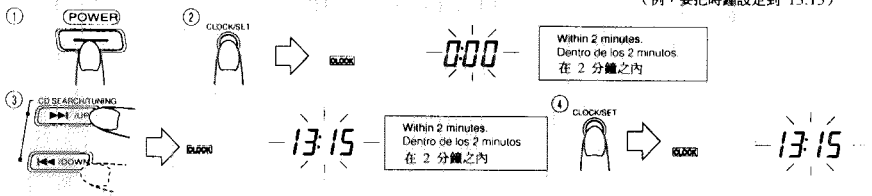
❶ Indicador del modo de temporizador
❷ Indicador de activación/desactivación (ON/OFF) del temporizador
❸ Indicador SLEEP
❹ Indicador CLOCK
❺ Indicación de hora
❻ Botón TIMER/SET
❼ Botón CLOCK/SET
❽ Botón del temporizador de desconexión (SLEEP)

時鐘/定時器部分的部件名稱及其功能。

❶ 定時器模式指示燈
❷ 定時器指示燈（ON/OFF）
❸ SLEEP 指示燈
❹ CLOCK 指示燈
❺ 時間顯示
❻ TIMER/SET 鍵
❼ CLOCK/SET 鍵
❽ SLEEP 鍵

Setting the current time (when this unit is used for the first time)

(Example: To set the clock to 13:15.)



① Set the POWER button to ON.
② Press the CLOCK/SET button for 2 seconds or more; "0:00" will blink in the display.
③ Set to 13:15 by pressing the |◄◄/►►| buttons. (When the button is kept pressed, the minute/hour indication changes continuously.)
④ Press the CLOCK/SET button; the time will light in the display.

- To set to the nearest second...
  Press the CLOCK/SET button when you hear the time signal from a TV or radio.

- **To confirm the current time (when the power is ON.)**
  Press the CLOCK/SET button. When the button is pressed again, the display shows the previously engaged mode.

Notes:
- Before performing timer recording or playback, it is necessary to set the current time.
- When the power cord is plugged in again after being disconnected or power is restored after a power failure, "CLOCK" will blink in the display. Set the current time again.

Ajuste de la hora actual (cuando se usa la unidad por primera vez)

(Ejemplo: Para ajustar el reloj a las 13:15)

① Coloque el botón POWER en ON.
② Presione el botón CLOCK/SET durante 2 seg. o más; "0:00" parpadeará en el visor.
③ Ajuste a la 13:15 presionando los botones |◄◄/►►|. (Si mantiene el botón presionado, la indicación de los minutos/ hora cambia continuamente).
④ Presione el botón CLOCK/SET; la hora se iluminará en el visor.

- Para fijar los segundos en forma más exacta...
  Presione el botón CLOCK/SET al escuchar la señal horaria de la televisión o la radio.

- **Confirmación de la hora actual (cuando la alimentación esté conectada.)**
  Presione el botón CLOCK/SET. Al presionarlo otra vez la indicación muestra el modo que estaba activado antes.

Notas:
- Antes de efectuar la grabación o reproducción por temporizador, es necesario ajustar la hora actual.
- Cuando se conecta el cordón de alimentación después de haberlo desconectado o cuando vuelve la energía después de un corte de la misma, "CLOCK" parpadeará en el visor. Ajuste otra vez la hora actual.

設定當前時間（在第一次使用本機時）

（例：要把時鐘設定到 13:15）

① 打開電源開關。
② 按住 CLOCK/SET 鍵 2 秒鐘以上，顯示窗中 0:00 閃爍。
③ 通過按|◄◄/►►|鍵設置 13:15。（當持續按住鍵時，分鐘/小時指示連續變化。）
④ 按 CLOCK/SET 鍵，時間指示在顯示窗中點亮。

- 要設定最準確的秒鐘…
  在聽到電視或無線電中的報時信號時按 CLOCK/SET 鍵。

- **要確認當前時間（當電源接通時）**
  按 CLOCK/SET 鍵。如果再按此鍵，顯示窗中顯示出先前所在的狀態。

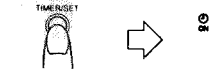
註：
- 在進行定時錄音或播放之前必須先設定當前時間。
- 當電源插頭在被拔下後再次插上，或者在斷電後電源恢複時，"CLOCK" 在顯示窗中閃爍。請再次設定當前時間。

TIMER OPERATIONS — OPERACIONES POR TEMPORIZADOR — 定時器操作

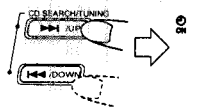
Setting the timer

- The current time must be set before the timer can be used.

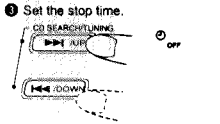
❶ Press the TIMER/SET button.



❷ Set the start time.
(Example: To set the timer to 12:15.)



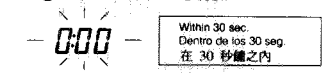
❸ Set the stop time.



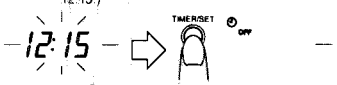
Ajuste del temporizador

- Antes de utilizar el temporizador es necesario ajustar la hora actual.

❶ Presione el botón TIMER/SET.

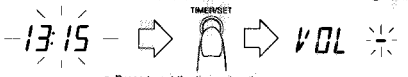


❷ Ajuste el tiempo de inicio.
(Ejemplo: Para ajustar el temporizador a las 12:15.)



- Press to set the start time.
- Presione para fijar la hora de comienzo.
- 按此鍵以設定開始時間。

❸ Ajuste la hora de parada.

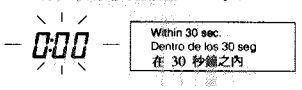


- Press to set the timer stop time.
- Presione para fijar la hora de desconexión del temporizador
- 按此鍵以設定停止時間。

設置定時器

- 在使用定時器之前必須先設定當前時間。

❶ 按 TIMER/SET 鍵。



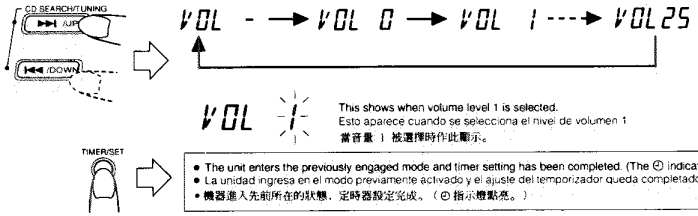
❷ 設定開始時間。
（例：要將定時器設至 12:15。）

❸ 設定停止時間。

❶ Set the volume.

❶ Ajuste el volumen.

❶ 設定音量。


CD SEARCH/TUNING
⏭ /UP
⏮ /DOWN
VOL - → VOL 0 → VOL 1 ---→ VOL 25
VOL 1
This shows when volume level 1 is selected.
Esto aparece cuando se selecciona el nivel de volumen 1
當音量 1 被選擇時作此顯示。
TIMER/SET
• The unit enters the previously engaged mode and timer setting has been completed. (The ⏲ indicator lights.)
• La unidad ingresa en el modo previamente activado y el ajuste del temporizador queda completado. (Se enciende el indicador ⏲)
• 機器進入先前所在的狀態，定時器設定完成。（⏲ 指示燈點亮。）

- When the volume setting is set to "VOL -" (volume level is not specified), the timer playback volume is at the level used before setting the timer.

- **To confirm the timer setting**

1. Each time the TIMER/SET button is pressed, the timer setting can be confirmed.
2. When the previously engaged mode is displayed, timer setting has been completed.

Note:

- When the timer is set incorrectly or the correct mode is not selected, perform "Setting the timer" from the beginning.

- Si se ajusta el volumen en "VOL -" (no se especifica el nivel del volumen), el volumen de la reproducción por temporizador permanece al nivel utilizado antes de ajustar el temporizador.

- **Comprobación del ajuste del temporizador**

1. El ajuste del temporizador puede ser confirmado al presionar el botón TIMER/SET.
2. Cuando se activa el modo anterior, el ajuste del temporizador queda completado.

Nota:

- Cuando se ajusta el temporizador incorrectamente o no se selecciona el modo correcto, ejecute el "Ajuste del temporizador", desde el principio.

- 當音量設定被設成 "VOL－" （音量電平沒有指定）時，定時播放的音量與設定定時器之前相同。

- **要確認定時器設定**

1. 每次按 TIMER/SET 鍵都可以確認定時器設定。
2. 當顯示先前所在的狀態時，定時器設定完成。

註：

- 當定時器設定不正確或沒有選擇正確的模式，從頭開始重新執行 "定時器設定" 。

Timer recording of broadcast

- The current time must be set correctly before you set timer recording.
- Make sure that the safety tabs of the cassette have not been broken off.

Operations

Grabación por temporizador de una radiodifusión

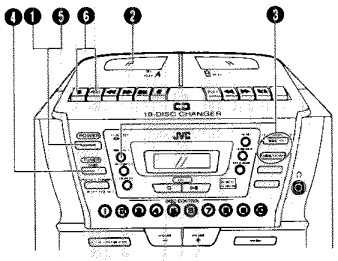
- La hora actual debe ser correctamente ajustada antes de ajustar la grabación por temporizador.
- Asegúrese de que las lengüetas de seguridad del cassette no estén rotas.

Operaciones

定時錄音廣播

- 在進行定時錄音之前必須先正確設定時間。
- 確認磁帶的防抹片沒有斷掉。

操作



❶ Set the POWER button to ON.
❷ Load a cassette.
❸ Set the timer. (Refer to "Setting the timer" on page 38.)
- Set the timer about a minute before the broadcast to be recorded is scheduled to start.

❹ Tune to the station to be recorded. (Refer to page 30.)
❺ Set the POWER button to STANDBY.
❻ Press the ○ REC and ► PLAY buttons of deck simultaneously.

- "⏲ REC" is shown in the display window.

❶ Coloque el botón POWER en ON.
❷ Coloque un cassette.
❸ Ajuste el temporizador. (Refiérase a "Ajuste del temporizador" en la página 38).
- Ajuste el temporizador a un minuto aproximadamente antes del comienzo programado de la radiodifusión a ser grabada.

❹ Sintonice la estación a ser grabada. (Refiérase a la página 30.)
❺ Coloque el botón POWER en STANDBY.
❻ Presione simultáneamente botones ○ REC y ► PLAY de la platina.

- Se visualiza "⏲ REC" en la ventanilla de indicacion.

❶ 打開電源開關。
❷ 裝入磁帶。
❸ 設置定時器。（參見第38頁上的 "設置定時器" 。）
- 將開始定時錄音的時間設定在要錄音的廣播開始的大約 1 分鐘之前。

❹ 調到要錄音的電台。（參見第30頁。）
❺ 將電源開關置於 STANDBY 狀態。
❻ 同時按錄音卡座的 ○ REC 鍵和 ► PLAY 鍵。

- 顯示窗中顯示 "⏲ REC" 。

- **Timer recording will start at the preset start time, and will stop at the end of the tape, no matter what stop time you preset. If the preset timer period is longer than the tape's remaining time, the recording will stop at the end of the tape and the tuner will remain on until the preset stop time.**

- **To cancel timer operation**
Press the TIMER/SET button so that the timer mode indicator (⏲) goes out.
If you do this, timer recording will not start at the timer start time.

Notes:
Once the timer has been set, the start and stop times, etc., are stored in memory. When timer recording or playback is required at different times, the timer must be set again.
- After setting the timer start and stop times, check that the tuner is tuned to the required frequency.

- **La grabación por temporizador se iniciará a la hora de inicio preajustada y parará al fin de la cinta, independientemente de que usted reajuste la hora de parada que programó. Si el ajuste del temporizador es más largo que el tiempo restante de la cinta, la grabación se detendrá al fin de la cinta y el sintonizador permanecerá activado hasta la hora de parada preajustada.**

- **Cancelación de la operación por temporizador**
Presione el botón TIMER/SET para apagar el indicador (⏲) de modo de temporizador.
Si usted hace esto, la grabación por temporizador no se iniciará a la hora de activación del temporizador.

Notas:
Una vez ajustado el temporizador, la hora de activación y desactivación, etc., son registradas en memoria. Cuando se desea efectuar una grabación o reproducción por temporizador a horas diferentes, es necesario ajustar otra vez el temporizador.
- Después de ajustar la hora de activación y desactivación, etc. del temporizador, verifique que el sintonizador esté sintonizado en la frecuencia deseada.

- **定時錄音在預設的開始時間開始，並在磁帶的末尾處結束，而不論所預設的結束時間。如果預設的定時錄音時間長度比磁帶剩余時間長度更長，錄音在磁帶的末尾處結束，調諧器繼續打開直至預設的停止時間。**

- **要取消定時器操作**
按 TIMER/SET 鍵以使定時器模式指示燈（⏲）熄滅。
這樣，定時錄音在定時器預設開始時間就不會開始。

註：
一旦設定了定時器後，開始和結束時間等就儲存在記憶體裡。要在不同的時間進行定時錄音或播放，就必須再次設定定時器。
- 在設定好定時器開始和結束時間後，檢查調諧器是否調到了所要的頻率。

Timer playback

- Timer playback of tapes, broadcasts and CDs is possible.

Operations

Reproducción por temporizador

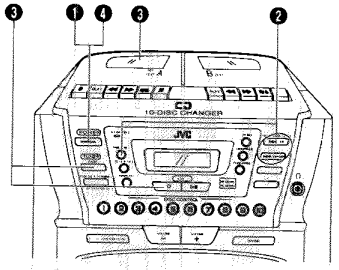
- La reproducción por temporizador de cintas, radiodifusiones, y CD es posible.

Operaciones

定時播放

- 可以作錄音帶、無線電廣播以及 CD 唱片的定時播放。

操作



❶ Set the POWER button to ON.
❷ Set the timer. (Refer to "Setting the timer" on page 38.)
❸ Select the source sound.

❶ Coloque el botón POWER en ON.
❷ Ajuste el temporizador. (Refiérase a "Ajuste del temporizador" en la página 38.)
❸ Seleccione la fuente de sonido.

❶ 打開電源開關。
❷ 設置定時器。（參見第 38 頁上的 "設置定時器" 。）
❸ 選擇聲源。

Source sound Fuente de sonido 聲源的聲音	Timer mode Modo de temporizador 定時器功能	Operations Operaciones 操作
CD play Reproducción de CD CD 放音	CD CD CD（CD 唱機）	Load a CD and press the □ button to set the CD mode. Coloque un CD y presione el botón □ para establecer el modo CD. 裝入一張唱片並按壓 □ 鍵鈕以設定 CD 模態。
Tape playback Reproducción de una cinta 錄音帶放音	TAPE TAPE TAPE（卡座）	Load a cassette tape. Coloque una cinta de cassette. 裝入一盤卡式錄音帶。
Radio broadcast Radioemisión 無線電廣播	TUNER TUNER TUNER（調諧器）	Press the TUNER/BAND button to set to the tuner mode and tune to the required frequency. Presione el botón TUNER/BAND para establecer el modo de sintonizador y sintonice la frecuencia deseada. 按壓 TUNER/BAND 按鍵以設定調諧器狀態並調諧到所需的頻率。

❹ Set the POWER button to STANDBY.
(Press the PLAY ► button of the deck for the timer playback of tape.)

❹ Coloque el botón POWER en STANDBY.
(Presione el botón PLAY ► de la platina para la reproducción de la cinta por temporizador.)

❹ 將電源開關置於 STANDBY 狀態。
（按卡座的 ► PLAY 鍵以進行磁帶的定時播放。）

- Timer playback will start at the timer start time and the power will be switched off at the timer stop time (tuner or CD).
  The power will not be switched off at the specified timer during tape operation but will switch off when the tape ends. The timer setting remains in the same timer mode even after the power is switched off and the same timer function will be repeated at the same time on the following day.

- **To cancel timer operation**
  Press the TIMER/SET button so that the timer mode indicator (⏲) goes out.

Notes:
- When the volume setting is set to "VOL -" (volume level is not specified), the timer playback volume is set to the level used before setting the timer.
- To stop during timer playback, press the POWER button to switch the unit off.
- When the power is switched on, it is possible to fade in the sound from volume level 0 (zero) to the preset volume.

- La reproducción por temporizador se iniciará a la hora de activación del temporizador y la alimentación se desconecta a la hora de desactivación del temporizador (sintonizador o CD).
  La alimentación no será desconectada a la hora especificada durante la operación de la cinta pero se desconectará al fin de la cinta. El ajuste del temporizador permanece igual en el mismo modo de temporizador aun después de desconectar la alimentación y la misma función de temporización se repetirá a la misma hora el día siguiente.

- **Cancelación de la operación por temporizador**
  Presione el botón TIMER/SET para apagar el indicador (⏲) de modo de temporizador.

Notas:
- Cuando se ajusta el volumen en "VOL -" (el nivel de volumen no está especificado), el volumen de reproducción por temporizador permanece en el nivel usado antes del ajuste del temporizador.
- Para parar durante la reproducción por temporizador, presione el botón POWER para desconectar la unidad.
- Cuando se conecta la alimentación es posible hacer que el sonido aumente gradualmente desde el volumen 0 (cero) al volumen actual.

- 定時播放在預設的開始時間開始，並在預設的結束時間結束（調諧器或CD）。
  在磁帶操作的預設時間電源不會關閉，但在磁帶末尾處電源關閉。即使在電源關閉後，定時器設定保持相同的定時模式，並且相同的定時器功能在第二天的相同時間重複。

- **要取消定時操作**
  按TIMER/SET鍵使定時方式指示燈（⏲）熄滅。

註：
- 當音量設定被設於"VOL -"（未指定音量電平）時，其定時播放的音量會被設定於上次所使用的電平。
- 在定時播放中若要停止，按 POWER 鍵以關閉電源。
- 當電源打開時，可以使音量從音量電平0（零）漸漸增加到預設的音量。

Sleep timer operations (using the remote control unit)

A. Use this when you want to fall asleep while listening to a tape, broadcast or CD.

① Set to the required source and tune (broadcast) or play back (CD or tape).
② Press the SLEEP button to set the sleep time.

Operación del temporizador de desconexión (utilizando la unidad de control remoto)

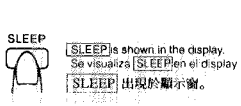
A. Utilice este modo cuando desee dormirse escuchando una cinta, radiodifusión o CD.

① Colóquelo en la fuente o música (radiodifusión) deseada, o en reproducción (CD o cinta).
② Presione el botón SLEEP para ajustar la hora de desconexión.

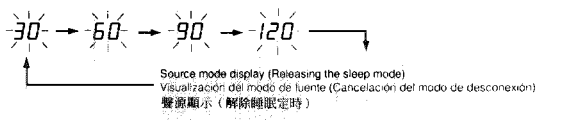
睡眠定時器操作（使用遙控器）

A. 當您欲邊聽錄音或者 CD 唱片、無線電廣播邊進入夢鄉時，可使用此功能。

① 設定您想聽的聲源和節目（電廣播）或播音（CD 或 磁帶）。
② 按壓 SLEEP 鍵，以設定睡眠時間。



SLEEP is shown in the display.
Se visualiza SLEEP en el display
SLEEP 出現於顯示窗。



- Sleep time settings of 30, 60, 90 or 120 minutes can be set. When you release the SLEEP button, the source is displayed after 5 sec.

- Los ajustes de la hora del despertador son 30, 60, 90 o 120 minutos. Cuando usted suelta el botón SLEEP la fuente es indicada después de transcurridos 5 seg.

- 睡眠的定時時間有 30 分、60 分、90 分以及 120 分可被選擇。當您按壓 SLEEP 鍵解除了睡眠定時以後，過 5 秒鐘聲源就會被顯示出來。

- The sleep timer operation will start and the power will be switched off after the specified time (Tuner & CD modes).
  The power will not switch off after the specified time during tape operation but will switch off when the tape ends.

- **Checking the sleep time**
  When the SLEEP button is pressed, the remaining sleep time is displayed. If it is pressed again, a new sleep time can be set.

- **To cancel the sleep timer operation**
  Press the POWER button to switch the power off or press the SLEEP button until the sleep time indicator disappears.

- Después de transcurrido el tiempo especificado se activa el temporizador de desconexión y la alimentación es desconectada (modos de sintonizador y CD). La alimentación no se desconecta después de la hora especificada durante la operación de la cinta, pero se desconectará cuando la cinta termine.

- **Verificación del tiempo para dormir**
  Cuando presiona el botón SLEEP, aparece la indicación del tiempo restante. Si lo presiona otra vez, es posible establecer un nuevo período para dormir.

- **Cancelación del temporizador de desconexión**
  Presione el botón POWER para desconectar la alimentación o presione el botón SLEEP hasta que el indicador del tiempo para dormir desaparezca.

- 指定時間一過，睡眠定時便開始工作而切斷電源。（調諧器以及 CD 模態）在磁帶播放方式時，當定時器的設定時間短於磁帶的剩餘播放時間時，在磁帶結束時電源關閉。

- **檢查睡眠定時的時間**
  按壓 SLEEP 鍵，剩餘的睡眠時間便會被顯示出來。如果再按壓一次該鍵，您就可以重新選擇一個新的睡眠時間。

- **若要取消睡眠定時的設定**
  按壓 POWER 鍵，斷開電源；或者按壓 SLEEP 鍵，直至睡眠定時的時間顯示消失。

B. To fall asleep while listening to a broadcast or CD and to perform timer playback the following morning

① Set the timer. (Refer to "Setting the timer" on page 38.)
② Set to the required source (broadcast or CD).

When falling asleep	When waking up
Broadcast →	Broadcast
CD play →	CD play

- During tape playback, the power is switched off when the tape ends, so only "When falling asleep" or "When waking up" operation is possible.

③ Press the SLEEP button to set the sleep time.

B. Para dormir mientras escucha una radiodifusión o un CD y efectuar la reproducción por temporizador la mañana siguiente

① Ajuste el temporizador. (Refiérase a "Ajuste del temporizador" en la página 38).
② Ajuste la fuente deseada (radiodifusión o CD).

Cuando vaya a dormir	Cuando despierta
Radiodifusión →	Radiodifusión
Reproducción de CD →	Reproducción de CD

- Al reproducir una cinta la alimentación se desconecta cuando la cinta termina, por eso la operación es posible sólo "Cuando vaya a dormir" o "Cuando despierta".

③ Presione el botón SLEEP para ajustar la hora de desconexión del temporizador.

B. 要在聽廣播或 CD 中入睡並在第二天早晨進行定時播放

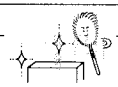
① 設置定時器。（參見第 38 頁上的"設置定時器"。）
② 設定想要的聲源（廣播 或 CD）。

入睡時	醒來時
廣播 →	廣播
播放 CD →	播放 CD

- 在磁帶播放中，當磁帶結束時電源關閉，所以"入睡時"或"醒來時"操作可能。

③ 按 SLEEP 鍵設定入睡時間。

MAINTENANCE / MANTENIMIENTO / 保養



Cleaning is important!
When the tape is running, magnetic powder and dust naturally accumulate on the heads, capstan and pinch roller. When they become too dirty...
- Sound quality deteriorates.
- The output sound level drops.
- Previously recorded tape is not completely erased.
- Recording is not performed satisfactorily.

Therefore, you should clean the heads, etc. after every 10 hours of use for optimal recording conditions.

Cleaning the heads, capstan and pinch roller
Open the cassette holder.
Clean the heads, pinch roller and capstan.
For effective cleaning, use a cleaning kit available from an audio store.
After cleaning, be sure that the cleaning fluid has dried completely before loading a cassette.

¡La limpieza es importante!
Cuando la cinta está girando, el polvo magnético y el polvo se acumulan naturalmente en las cabezas, cabrestante y rodillo de presión. Cuando estén muy sucios...
- La calidad de sonido se deteriora.
- El nivel de salida de sonido se reduce.
- Las cintas grabadas no se borran completamente.
- La grabación no se realiza satisfactoriamente.

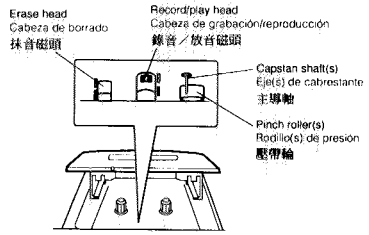
Por lo tanto, usted debe limpiar las cabezas, etc. después de cada 10 horas de uso para obtener condiciones de grabación óptimas.

Limpieza de las cabezas, cabrestante y rodillo de presión
Abra el portacassette.
Limpie las cabezas, rodillo de presión y cabrestante.
Para una limpieza efectiva, utilice un conjunto de limpieza disponible en cualquier tienda de audio.
Después de la limpieza, asegúrese de que el líquido para la misma se haya secado completamente antes de colocar un cassette.

清潔工作是極為重要的!
當錄音帶走帶的時候，磁粉、灰塵自然會積蓄在磁頭、主導軸以及壓帶輪上。當這些部件太污穢時…
- 音質低劣
- 音量下降
- 以前錄制的錄音不能完全消去
- 錄音不理想

因此，每使用 10 個小時您就該清洗磁頭等，這樣，您的錄音就會完美無憾。

清洗磁頭、主導軸以及壓帶輪
打開錄音帶艙。
清洗磁頭、主導軸以及壓帶輪。
音響設備商店有整套清洗工具出售，使用這種清洗工具便能清洗得乾淨。
清洗以後，須待清洗液完全乾了才可裝入錄音帶。



Cautions:
1. Keep magnets and metallic objects away from the head.
   If the head becomes magnetized, noise will increase and the sound will deteriorate. Demagnetize the head every 20-30 hours of use with a head eraser (available from an audio store). (When demagnetizing the head, the POWER button should be set to STANDBY.)
2. Do not use anything other than alcohol for cleaning.
   Thinner and benzine will damage the rubber pinch roller.

Precauciones:
1. Mantenga los imanes y los objetos metálicos lejos de la cabeza.
   Si la cabeza se magnetiza, el ruido aumentará y el sonido se deteriorará. Desmagnetice la cabeza cada 20-30 horas de uso con un desmagnetizador de cabezas (disponible en cualquier tienda de audio). (Cuando desmagnetiza la cabeza, el botón POWER deberá estar colocado en STANDBY).
2. Para limpieza no utilice ningún otro producto que no sea alcohol.
   El diluyente y la bencina dañarán el rodillo de presión de goma.

注意：
1. 切勿讓磁體、金屬物接近磁頭。
   如果磁頭磁化了，噪音將會變蓋，聲音將會失真。每使用20至30小時以後，請用磁頭消磁器（於音響設備商店有售）給磁頭消磁。（給磁頭消磁的時候，必須按壓 POWER 鍵將其設於 STANDBY（待機）的位置）。
2. 清洗劑僅限於酒精，其它一概不可使用。
   如果使用天然水、石油精，將會損壞橡膠製的壓帶輪。

TROUBLESHOOTING

What appears to be trouble is not always serious. First make sure....

- **When abnormal operation occurs.**
  * Unplug the AC power cord from the AC outlet and remove all the batteries. Then reload the batteries after a few minutes, reconnect the AC power cord and switch the power ON.
- **Power cannot be turned on.**
  * Is the power cord unplugged?
- **No sound from the speakers.**
  * Are headphones connected?

(CD Player Section)
- **The CD player does not play.**
  * Is the CD upside down?
  * Is the CD dirty?
- **A certain portion of the CD does not play correctly.**
  * Is the CD scratched?
- **CD playback is not performed when the CD CONTROL button is pressed.**
  * Is program mode engaged?
- **When the operation stops.**
  * Switch the power OFF (STANDBY) and ON again.

(Cassette Deck Section)
- **Playback sound is at a very low level.**
  * Is the head dirty?
- **The ○ REC button does not function.**
  * Have the safety tabs of the cassette been broken off?

(Tuner Section)
- **Reception is noisy.**
  * Try adjusting the antenna.

(Timer Section)
- **Timer operation does not start.**
  * Is the current time set correctly?
  * Is the timer mode indicator (⏲) displayed?

(Remote Control)
- **Remote control is impossible.**
  * Are the batteries in the remote control exhausted?
  * Is the REMOTE SENSOR section exposed to bright light (direct sunlight, etc.)?

Note:
Before making an important recording, be sure to make a test recording first to check that the deck, etc. is working correctly.

DETECCION DE PROBLEMAS

Lo que parece ser un problema no siempre es grave. Primero asegurese....

- **Cuando ocurre una falla de funcionamiento.**
  * Desenchufe el cordón de CA del tomacorriente y extraiga todas las pilas. Luego recoloque las pilas después de transcurridos unos pocos minutos; reconecte el cordón de CA y conecte ON la alimentación.
- **No es posible conectar la alimentación.**
  * ¿Está el cordón de alimentación desenchufado?
- **No sale sonido de los altavoces.**
  * ¿Están los auditonos conectados?

(Sección del reproductor de CD)
- **El reproductor de CD no funciona.**
  * ¿Está el CD invertido?
  * ¿Está el CD sucio?
- **Cierta porción de un CD no es correctamente reproducida.**
  * ¿Está el CD rayado?
- **La reproducción del CD no se realiza cuando el botón CD CONTROL está presionado.**
  * ¿Está el modo de programa activado?
- **Cuando la operación para.**
  * Desconecte la alimentación OFF (espera) y conéctela ON otra vez.

(Sección la platina de cassette)
- **El sonido de reproducción tiene un nivel muy bajo.**
  * ¿Está la cabeza sucia?
- **El botón ○ REC no funciona.**
  * ¿Están las lengüetas de seguridad del cassette rotas?

(Sección del sintonizador)
- **La recepción es ruidosa.**
  * Intente ajustar la antena.

(Sección del temporizador)
- **La operación por temporizador no se activa.**
  * ¿Está la hora actual correctamente ajustada?
  * ¿Está el indicador (⏲) de modo de temporizador indicado?

(Controlador remoto)
- **La operación a distancia es imposible.**
  * ¿Están las pilas del mando a distancia agotadas?
  * ¿Está la sección REMOTE SENSOR expuesta a una luz brillante (luz directa del sol, etc.)?

Nota:
Antes de efectuar una grabación importante, asegúrese de hacer una grabación de prueba para verificar que la platina, etc. esté funcionando correctamente.

故障的檢查與排除

並非所有問題都是嚴重的。
首先檢查一下…

- **當出現異常操作時**
  * 從交流插座上拔下交流電源線。
    然後重新進行連接并接通電源。
- **電源無法接通。**
  * 電源線的插頭是否插好了？
- **揚聲器沒有聲音。**
  * 是否有耳機插著？

（CD 唱機部分）
- **CD 唱機沒有聲音。**
  * 唱片應該朝上的一面是否朝下放了？
  * 唱片是否污穢了？
- **某些地方的放音有異常。**
  * 唱片是否有劃傷？
- **當按壓 CD CONTROL 鍵時，不能進行CD 播放。**
  * 是否預約了編程方式？
- **當操作停止時**
  * 重新關閉電源（待機），然後再次打開。

（卡式座部分）
- **放音的聲音極低。**
  * 磁頭是否污穢了？
- **○REC 鍵錯失靈。**
  * 卡式錄音帶上的防誤消錄音保險片是否被折掉了？

（調諧部分）
- **收音有噪音。**
  * 調試天線。

（定時器部分）
- **定時器不啟動。**
  * 現在時間的設定是否正確？
  * 定時功能的指示（⏲）是否被顯示出來了？
- **遙控器失靈。**
  * 遙控器的電池是否耗盡？
  * 遙控感應器（REMOTE SENSOR）是否受強烈光照（直射陽光等）？

註：

若要作重要的錄音，在此之前請務必作一次試錄，以便檢查卡式座等的工作狀況是否良好。

SPECIFICATIONS

CD player section

Type	:	Compact disc player
Signal detection system	:	Non-contact optical pickup
Number of channels	:	2 channels
Frequency response	:	20 Hz - 20,000 Hz
Signal-to-noise ratio	:	90 dB
Wow & flutter	:	Less than measurable limit

Radio section

Frequency range	:	FM 87.5-108 MHz AM 531-1,602 kHz (with channel space mode set to AM 9 kHz) AM 530-1,710 kHz (with channel space mode set to AM 10 kHz) SW 5.75-17.95 MHz

ESPECIFICACIONES

Sección del reproductor de CD

Tipo		Reproductor de discos compactos
Sistema de detección de señal		Captor óptico sin contacto
Número de canales		2 canales
Respuesta de frecuencia		20 Hz - 20 000 Hz
Relación señal-ruido		90 dB
Fluctuación y tremolación		Menor que el límite medible

Sección de la radio

Límites de frecuencia		FM: 87.5-108 MHz AM: 531-1.602 kHz (con modo de espaciamiento de canales ajustado en AM 9 kHz) AM: 530-1.710 kHz (con modo de espaciamiento de canales ajustado en AM 10 kHz) OC: 5.75-17.95 MHz

規格

CD唱機部分

類型	：	小型雷射唱機
信號檢測	：	無觸點唱頭
聲道數	：	雙聲道
頻率范圍	：	20Hz-20,000Hz
信噪比	：	90 dB
晃抖度	：	小於可測限度

無線電收音機部分

頻率范圍	：	FM 87.5-108 MHz AM 531-1,602 MHz （頻道間隔方式為 AM9kHz） AM 530-1,710 kHz （頻道間隔方式為 AM10kHz） SW 5.75-17.95 MHz

Antennas	:	Telescopic antenna for FM/SW Ferrite core antenna for AM/SW

Tape deck section

Track system	:	4-track 2-channel stereo
Motor	:	Electronic governor DC motor for capstan
Heads	:	Deck A; Hard permalloy head for recording/playback, 2 gap ferrite head for erasure Deck B; Hard permalloy head for playback
Frequency response	:	63-12,500 Hz
Wow & flutter	:	0.15% (WRMS)
Fast wind time	:	Approx. 120 sec (C-60 cassette)

Speaker Section (each unit)

Speakers		
(Impedance)	:	12 cm x 1 (4 Ω), 5 cm x 1 (4 Ω)
Dimensions	:	183 (W) x 272 (H) x 256 (D) mm
Weight	:	Approx. 1.8 kg

General

Power output	:	30 W (15.0 W + 15.0 W) at 4 Ω (Max.)
Input jack	:	MIX MIC (6.3 mm dia. plug) (Maching impedance: 200 Ω-2 kΩ)
Output terminals	:	PHONES x 1 (Output level: 0-15 mW/ch, 32 Ω, Matching impedance: 16 Ω - 1 kΩ) Speaker x 2 (Matching impedance 4 Ω - 16 Ω)
Power requirements	:	AC 110 V/127 V/230 V, 50/60 Hz DC 13.5 V ("R20/D (13F)" batteries x 9) Ext. DC 12 V (car battery via optional CA-R120 E car adapter)
Power consumption	:	31 W (with POWER SW ON) 4.5 W (with POWER SW STANDBY)
Dimensions	:	668 (W) x 295 (H) x 318 (D) mm including knobs
Weight	:	(with batteries) 10.4 kg (without batteries) 9.4 kg
Accessories provided	:	AC power cord x 1 Remote control unit (RM-RXP1070) x 1 "R6/AA (15F)" batteries x 2 (for the remote control) AC plug adapter x 1

Design and specifications are subject to change without notice.

Area suffix
US ..... Singapore
U ..... other areas

Antenas		Antena telescopica para FM/OC Antena de núcleo de ferrita para AM/OC

Sección de la platina de cinta

Sistema de pistas		4 pistas 2 canales estereofónicos
Motor		Motor de CC controlado electrónicamente para el cabrestante
Cabezas		Platina A; Cabeza de aleación dura "permalloy" para grabación/reproducción; cabeza de ferrita de doble entrehierro para borrado Platina B; Cabeza de aleación dura "permalloy" para reproducción
Respuesta de frecuencia		63-12 500 Hz
Fluctuación y tremolación		0.15% (WRMS)
Tiempo de bobinado rápido		120 seg. aprox. (cassette C- 60)

Sección de altavoces (cada unidad)

Altavoces		
(impedancia)		12 cm x 1 (4 Ω), 5 cm x 1 (4 Ω)
Dimensiones		183 (A) x 272 (Alt.) x 256 (P) mm
Peso		Aprox. 1.8 kg

Generalidades

Salida de potencia		30 W (15.0 W + 15.0 W) a 4 Ω (máx.)
Jacks de entrada		MIX MIC (6.3 mm a conector) (Impedancia de adaptación 200 Ω-2 kΩ)
Terminales de salida		PHONES x 1 (nivel de salida: 0-15 mW/ch, 32 Ω, Impedancia de adaptación 16 Ω - 1 kΩ) Altavoz x 2 (impedancia de adaptación de 4 Ω - 16 Ω)
Requisitos de alimentación		110 V/127 V/230 V CA, 50/60 Hz 13,5 V CC (pilas "R20/D (13F)" x 9) Ext. de 12 V CC (DC IN) (bateria del automóvil via adaptador para opcional para automóvil CA-R120E)
Consumo de energía		31 W (con POWER en ON) 4,5 W (con POWER en STANDBY)
Dimensiones		668 (A) x 295 (Alt.) x 318 (P) mm, incluyendo las perillas
Peso		(con pilas) 10.4 kg (sin pilas) 9,4 kg
Accesorios suministrados		Cordón de CA x 1 Unidad de control remoto (RM-RXP1070) x 1 Pilas "R6/AA (15F)" x 2 (para el controlador remoto) Adaptudor para enchute de CA x 1

Diseño y especificaciones sujetos a cambio sin aviso.

Sufijo de área
US ..... Singapur
U ..... otros paises

天線	：	FM/SW 用伸縮天線 AM/SW 用磁芯天線

卡式座部分

聲軌方式	：	4 聲軌雙聲道立體聲
馬達	：	轉盤用電調速直流馬達
磁頭	：	A 卡座：錄音/放音用硬性透磁合金磁頭，抹音用雙縫磁性磁頭 B 卡座：放音用硬性透磁合金磁頭
頻率響應	：	63－12,500 Hz
晃抖度	：	0.15%（WRMS）
快進時間	：	約 120 秒（C－60 卡式錄音帶）

揚聲器部分（每個單元）

揚聲器	：	12 cm×1（4 Ω）、
（阻抗）		5 cm×1（4 Ω）
尺寸	：	183（寬）×272（高）×256（深）mm
重量	：	約 1.8 kg

綜合

輸出功率	：	30W（15.0W＋15.0W）於 4 Ω（最大）
輸入插孔	：	麥克風（MIX MIC）（直徑 6.3 mm 插頭）（匹配阻抗：200 Ω－2k Ω）
輸出端子	：	耳機（PHONES）×1（輸出電平：0－15mW/頻道，32 Ω；匹配阻抗：16 Ω－1k Ω） 揚聲器×2（匹配阻抗：4 Ω－16 Ω）
單元要求	：	AC110V/127V/230V，50/60 Hz DC 13.5V（"R20/D(13F)"電池×9） 外接 DC IN 12V（汽車電池，使用可選 CA－R120E 汽車轉接器）
功耗	：	31W（於 POWER SW ON 時） 4.5W（於 POWER SW STANDBY 時）
尺寸	：	668（寬）×295（高）×318（深）mm （包括旋鈕）
重量	：	10.4 kg（包括電池） 9.4 kg（不包括電池）

附件 ： 交流電源線×1
遙控器（RM－RXP1070）×1
"R6/AA(15F)"電池×2
（遙控器用）
AC 插頭適配器×1

設計及規格若有變更，恕不另行通知。

地區簡稱
US ..... 新加坡
U ..... 其它地區

© 1996 VICTOR COMPANY OF JAPAN, LIMITED

JVC
VICTOR COMPANY OF JAPAN, LIMITED

VNN7073-111M

1 Location of Main Parts

■ Front cabinet inside

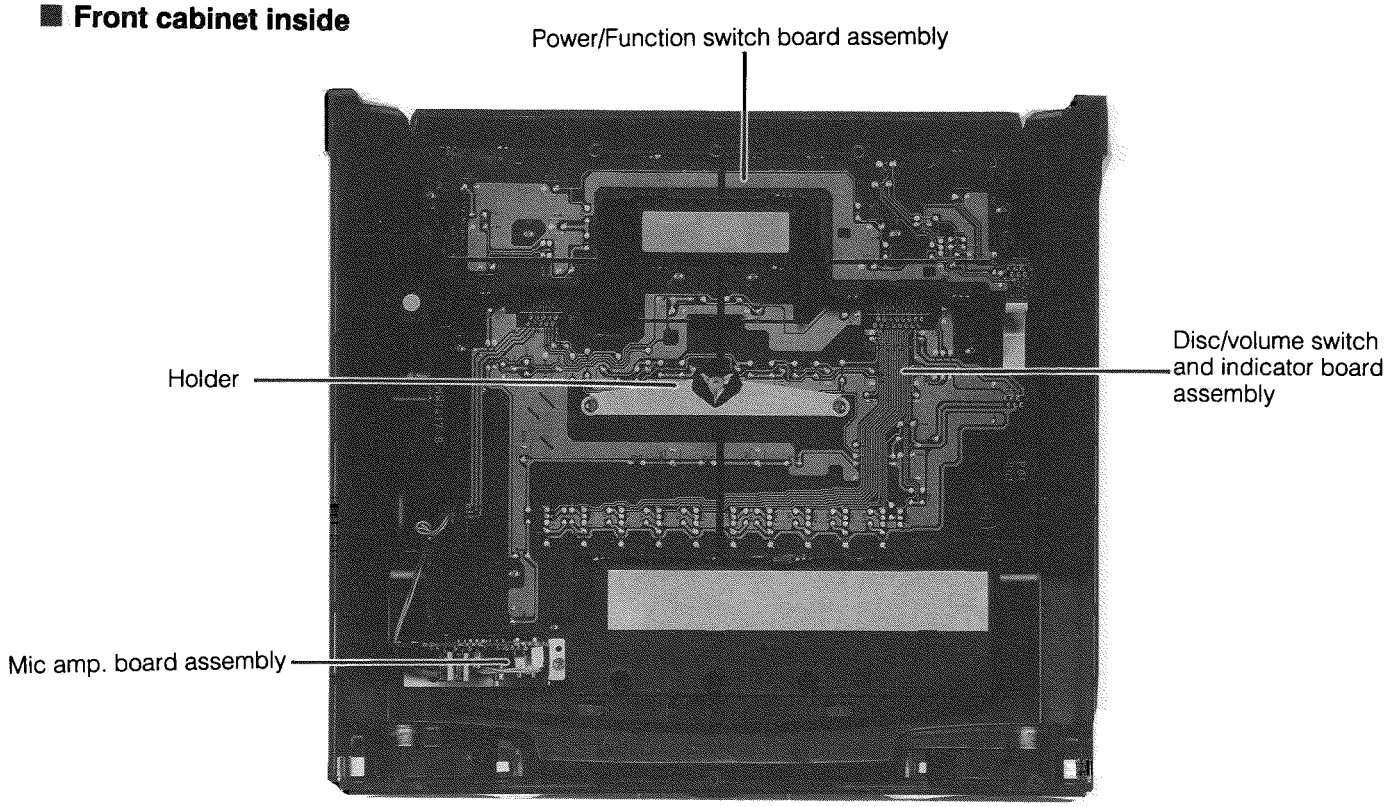


Fig.1-1

■ Rear cabinet front view

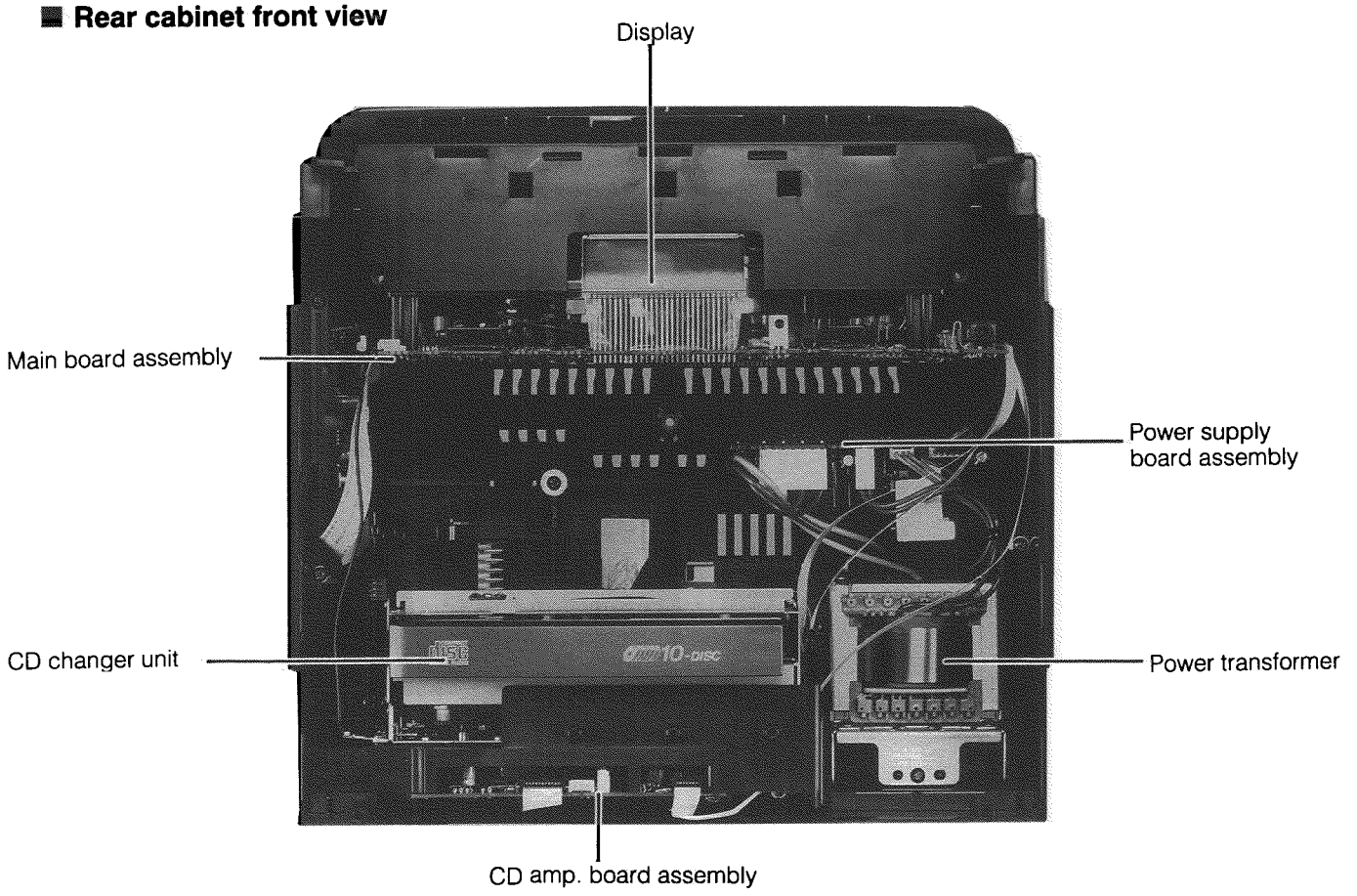


Fig.1-2

■ CD unit (Top side)

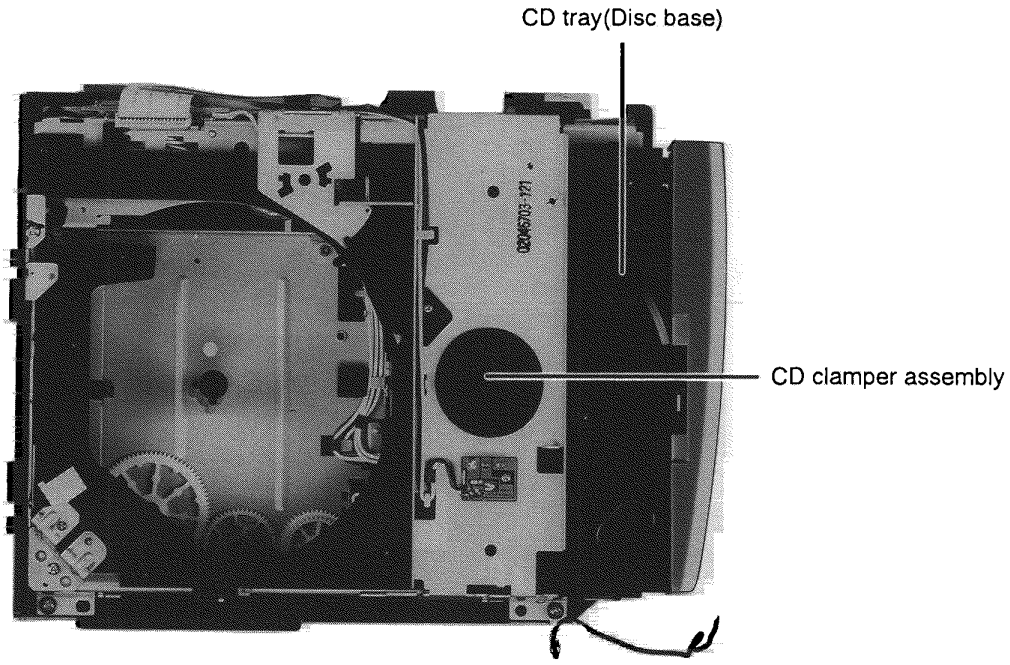


Fig.1-3

■ CD unit (Bottom side)

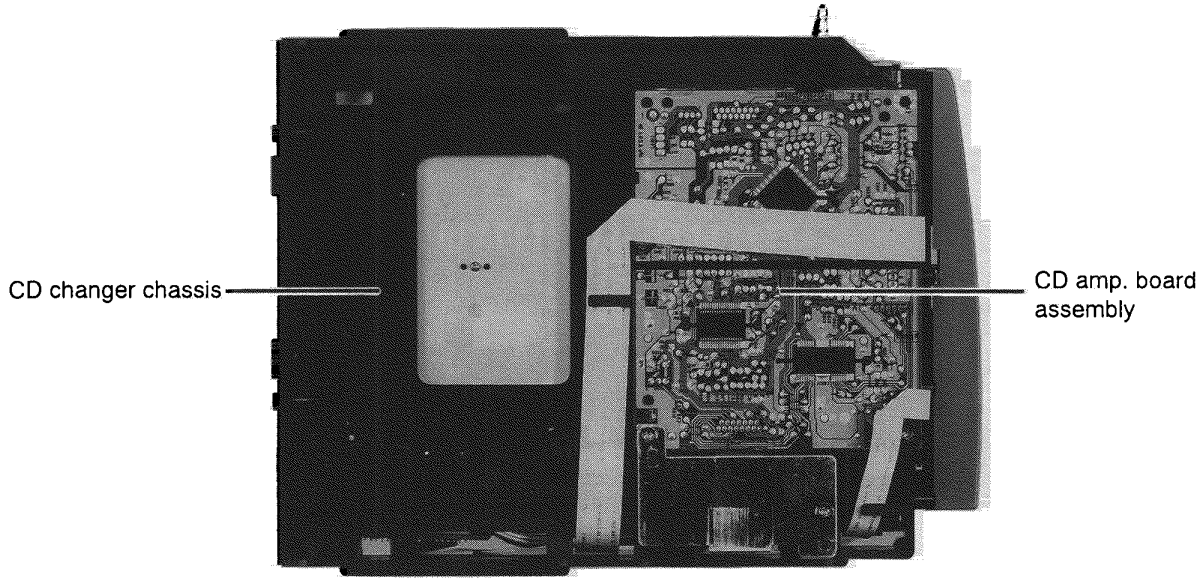


Fig.1-4

Top cabinet (Top side)

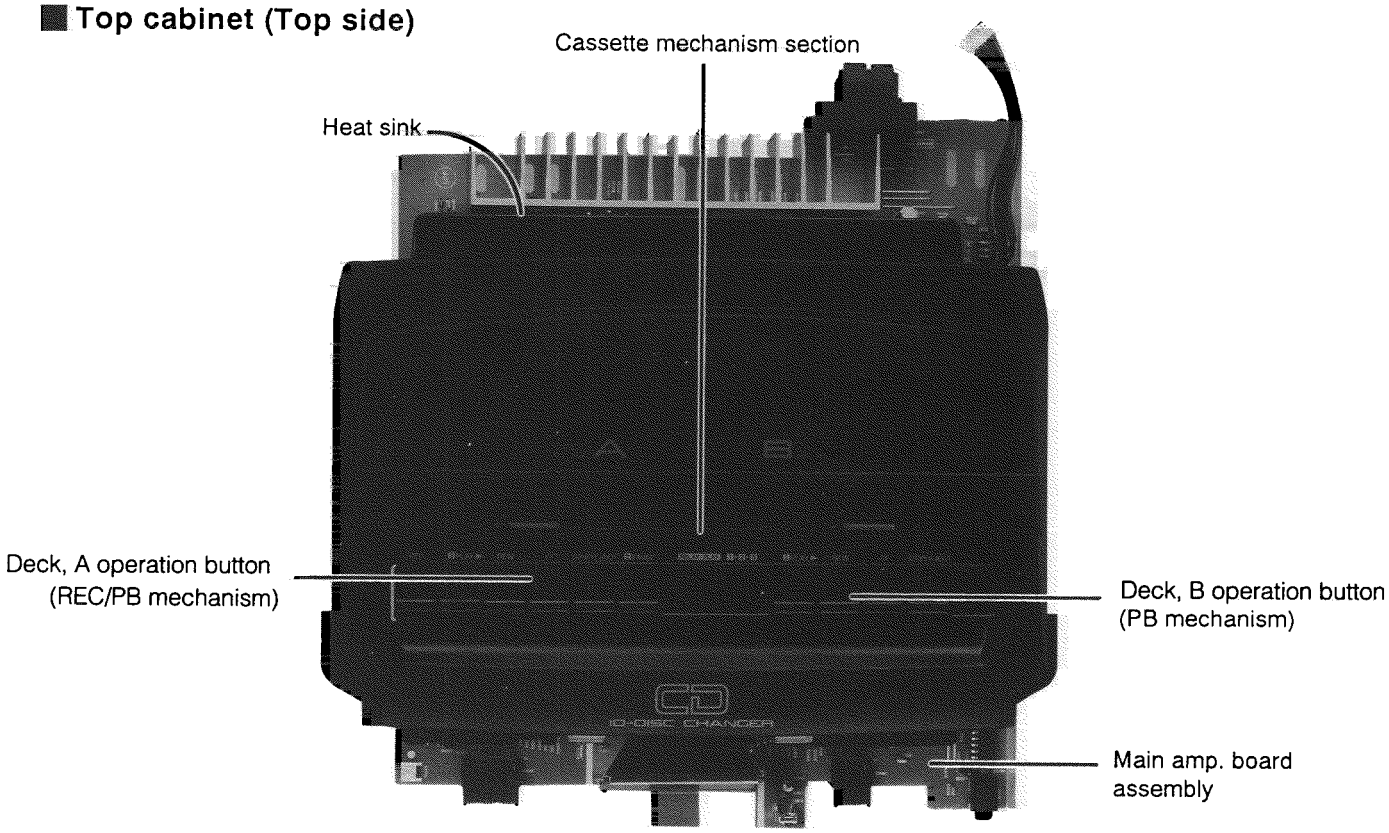


Fig.1-5

Top cabinet unit (Bottom side)

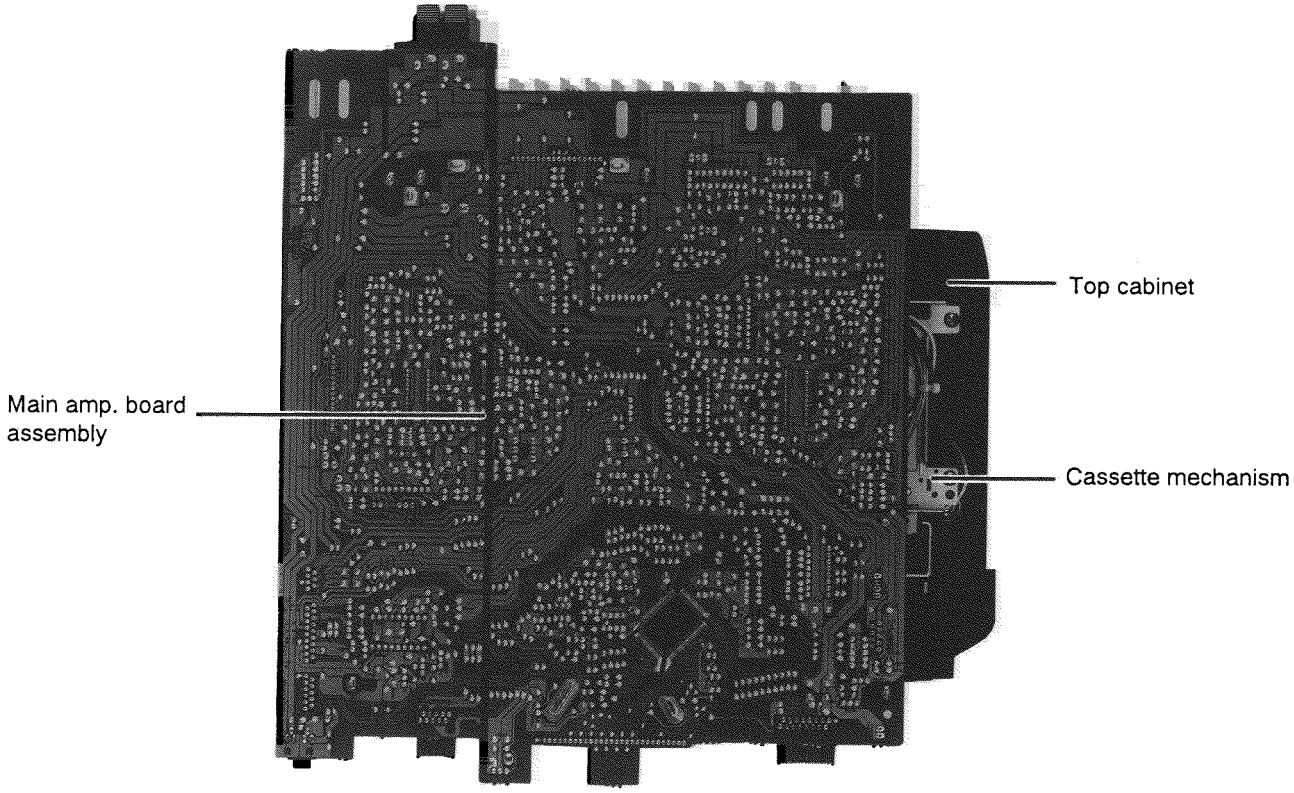


Fig.1-6

■ Top cabinet (Bottom side)

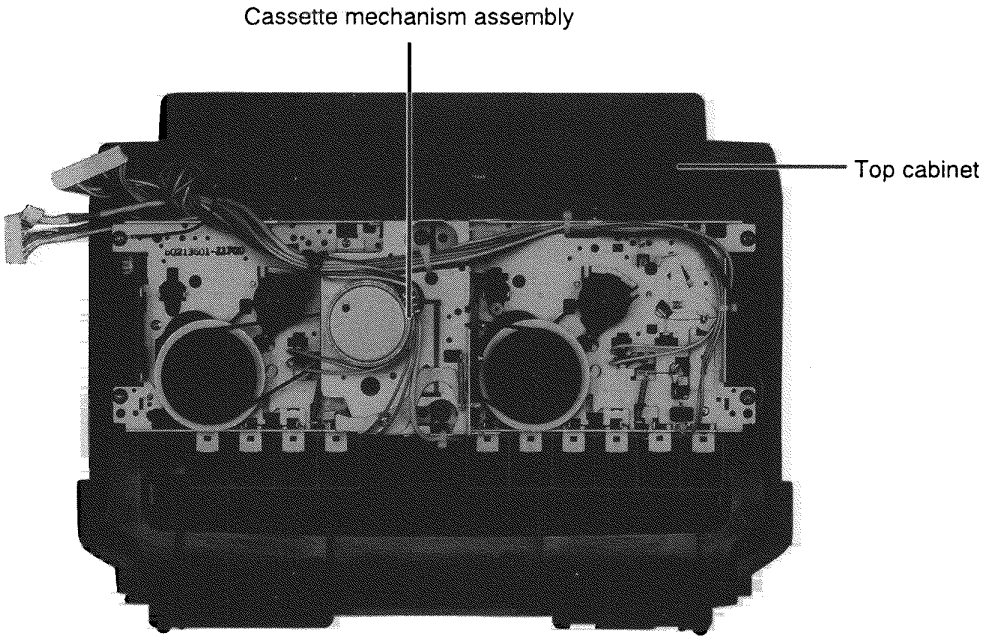


Fig.1-7

■ Main board (Top side)

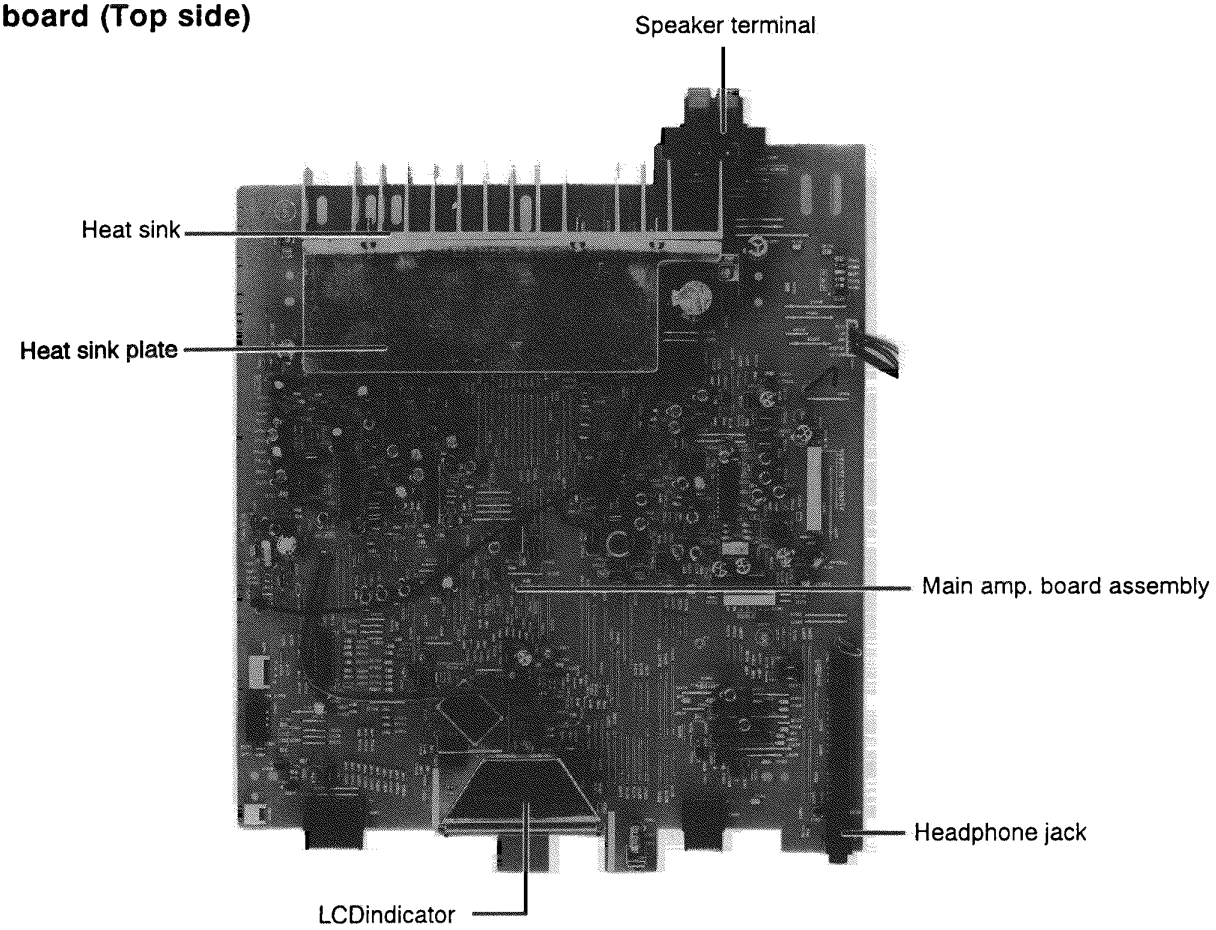
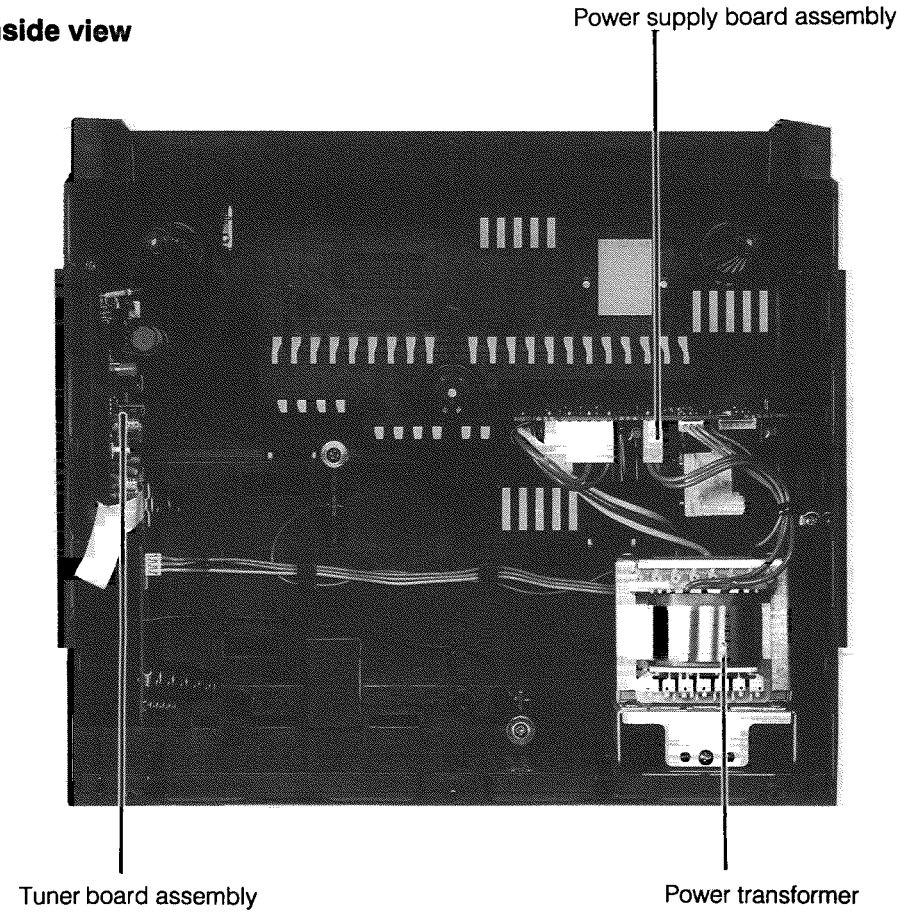


Fig.1-8

■ Rear cabinet inside view



2 Removal of Main Parts

■ Enclosure section

◆ Front cabinet (Fig.2-1~Fig. 2-2)

1. Remove the six screws ① retaining the front cabinet from the rear and bottom. (Use a screwdriver with a shank length of 22 cm or more.)
2. Remove the two screws ② retaining the front cabinet from both sides.
3. The front cabinet can be removed if pulled towards the front.

◆ CD player unit (Fig. 2-3)

1. Disconnect the three flat wires connected to the CD player from main PC board connectors CN401, CN905, and CN904.
2. Disconnect the changer earth connector CN403 on the main board.
3. Remove the two scrwes ⑭ ertaining the CD changer unit from battery house.
4. The CD player unit can be removed from the rear cabinet if pulled towards the front.

(※ At this time, you can replace the fuse mounted on the power PC board in the back right corner of the rear cabinet.)

◆ Cassette mechanism and main amplifier board assembly unit (Fig. 2-1, Fig. 2-3)

1. Remove the two screws ③ securing the speaker terminal from the rear of the rear cabinet. (See Fig. 2-1.)
2. From the front, disconnect the flat wire to the tuner PC board from main PC board connector CN903.
3. Pull out the cassette mechanism and main PC board ass'y from the rear cabinet, then disconnect the wire connector (FW601) on the main PC board from power PC board ass'y connector CN191 located in the back right corner of the rear cabinet.

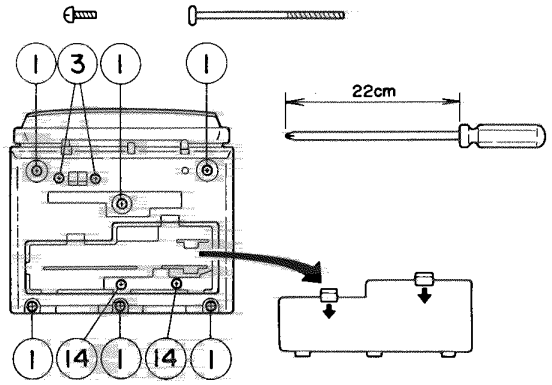


Fig. 2-1

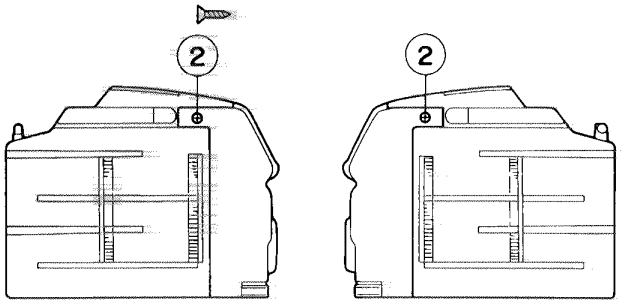


Fig. 2-2

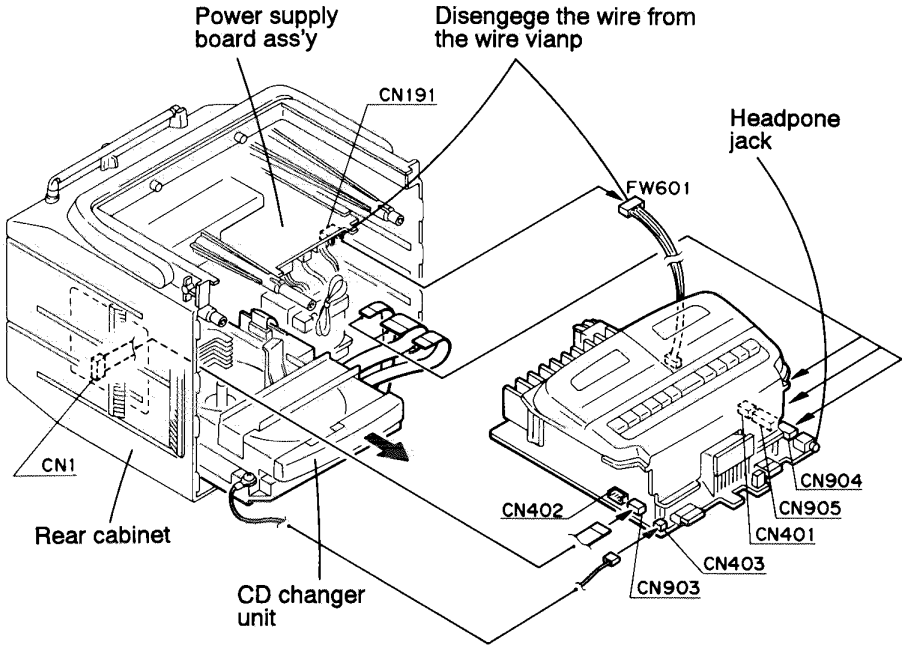


Fig. 2-3

◆ Power transformer and power supply board assembly (Fig. 2-4)

1. Install the AC jack of the power PC board assembly onto the rear cabinet, then remove the two screws ④.
2. Disengage the tab on the battery PC board, then remove the PC board together with the power PC board. If necessary, disconnect the connector to the power transformer and battery wire (CN192, CN193 and CN194).
3. Disengage the power transformer wire and battery wire holder.
4. Remove the three screw ⑤ retaining the power transformer assembly.

◆ Tuner board ass'y (Fig. 2-4)

1. Disconnect the antenna wire from TP1 on the tuner PC board.
2. Remove the two screws ⑦ retaining the PC board holder.
3. Pull out the PC board assembly from the rear cabinet.

◆ Internal parts of the front cabinet (Fig. 2-5)

1. Remove the front cabinet.
2. Remove the rour screws ⑧ retaining the power/Function switch board.
3. Disengage the two pawls ⑨ retaining the power/Function switch board.
4. Remove the three screws ⑩ retaining the PC board holder.
5. Remove the five screws ⑪ retaining the changer swith PC board.
6. Remove the two pawls ⑮ retaining the changer switch PC board.
7. Remove the two screws ⑯ retaining the mic amp,P.C board.

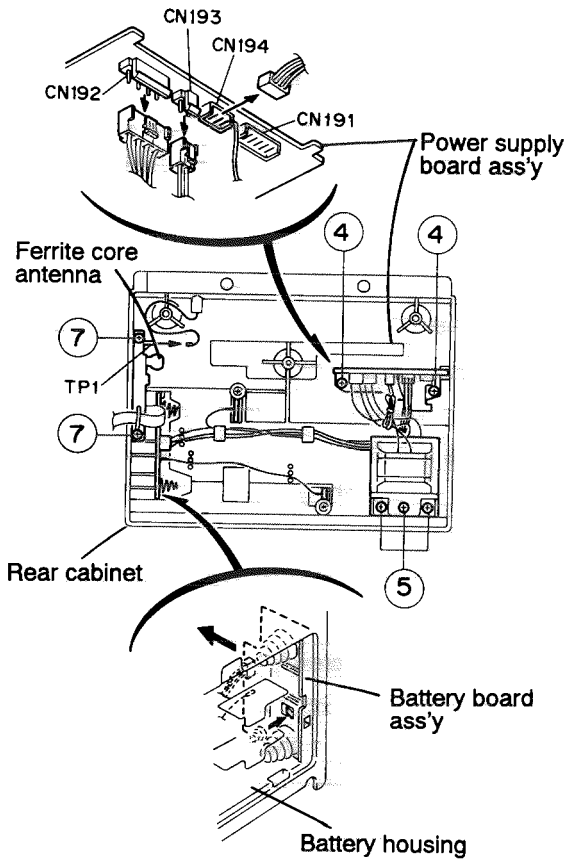


Fig. 2-4

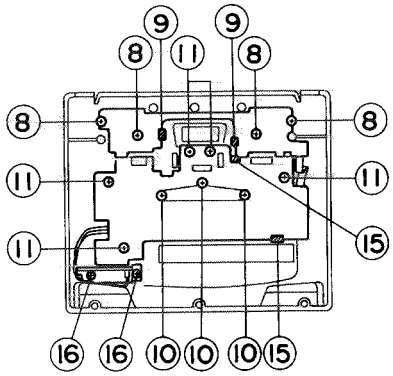


Fig. 2-5

◆ Main board ass'y and cassette mechanism ass'y

(Fig. 2-6~Fig. 2-7)

1. Remove the front cabinet.
2. Remove the cassette mechanism assembly and main board assembly unit from the rear cabinet.
3. Turn the unit upside down so that the top cabinet faces down.
4. Remove the four screws ⑫ retaining the main board ass'y.
5. Slightly lift the main PC board, then disconnect the parallel wires coming from the switch PC board assembly from CN701 on the main PC board assembly.
6. Turn the main PC board assembly upside down (the parts side will face up). Disconnect the wire holder PP on the PC board, then disconnect the A mechanism head wire CN702 (7 pins), the B mechanism head wire CN701 (3 pins), and the mechanism drive connector CN703 (15 pins).
7. Remove the six screws ⑬ retaining the mechanism.
8. Open the cassette door, then remove the cassette mechanism unit from the top cabinet.

◆ Removing the cassette door (Fig. 2-8)

a. Remove the cassette mechanism ass'y, push the cassette door left arm inward, disengage the door shaft and remove it from the top cabinet. Make sure to hold the edge while performing this step or the door spring may fly out, possibly causing injury.

b. When reattaching, start with the door spring side, then push the opposite side in.

c. Fit the door spring into the slit.

(※ Although cassette door removal is possible with the mechanism assembly mounted, removing the mechanism assembly beforehand will make it easier and ensure correctness.)

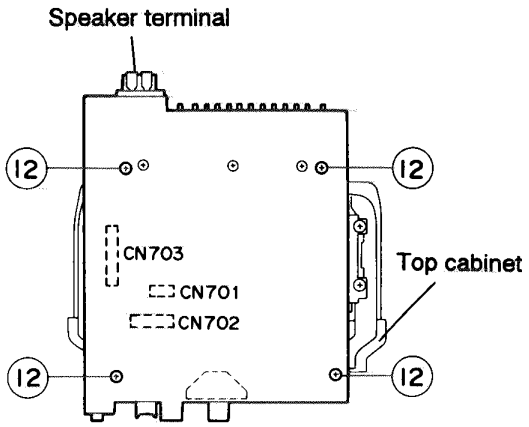


Fig. 2-6

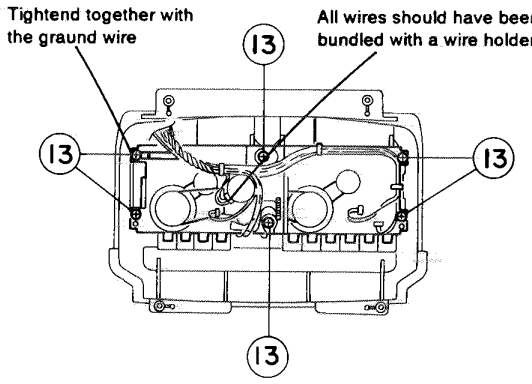


Fig. 2-7

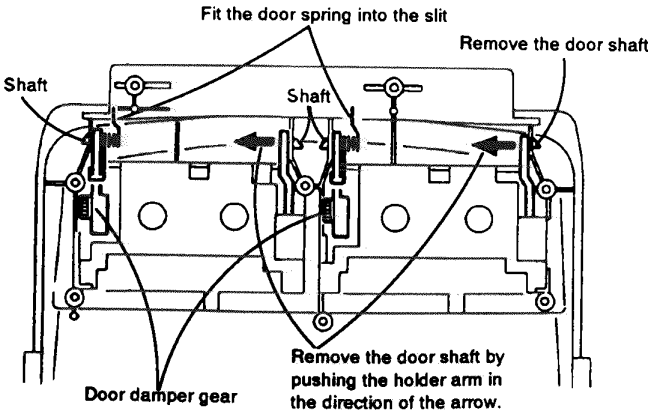

Fit the door spring into the slit
Remove the door shaft
Shaft
Shaft
Remove the door shaft by pushing the holder arm in the direction of the arrow.
Door damper gear

Fig. 2-8

■ CD changer section

◆ Removing the CD Mechanism Holder

1. Remove the four screws ① retaining the CD mechanism holder.

2. After turning over the changer unit, remove the two screws ② retaining the shield plate and one screw ③ retaining the CD amp.

3. Remove the shield plate of the pickup unit, and raise the CD amp. P.C. board assembly. Next, disconnect the two wires connecting the P.C. board and CD mechanism, as well as the pickup card wire (CN601) and motor wire (CN602).

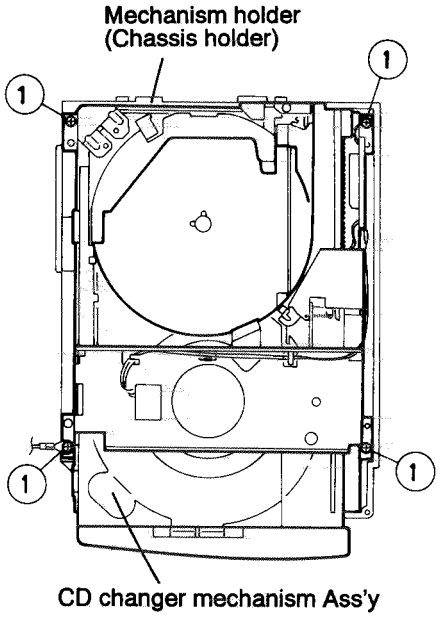


Fig. 2-9

◆ Clamper Unit

1. Remove the two screws ④ retaining the clamper unit from both sides of the mechanism.

2. After opening the bottom side of the clamper bracket a little toward outside, remove the bracket.

3. Remove the sensor P.C. board as necessary from the clamper bracket (For this purpose, remove the one screw retaining the P.C. board).

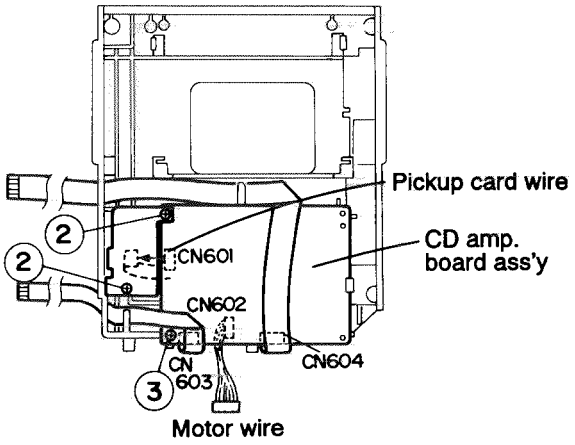


Fig. 2-10

◆ CD Tray (Disc Base)

* Under the conditions wherein the laser pickup has been raised, lower the pickup while turning the gear G4 (L) of the CD mechanism unit fully in clockwise direction. Then, it will become ready to pull out the tray.

1. After pulling out the CD play by about 50 mm, remove the one screw ⑤ retaining the stopper bracket provided on the right side of the tray.

2. Pull out the tray fully to the movable position,and turn over the changer unit.

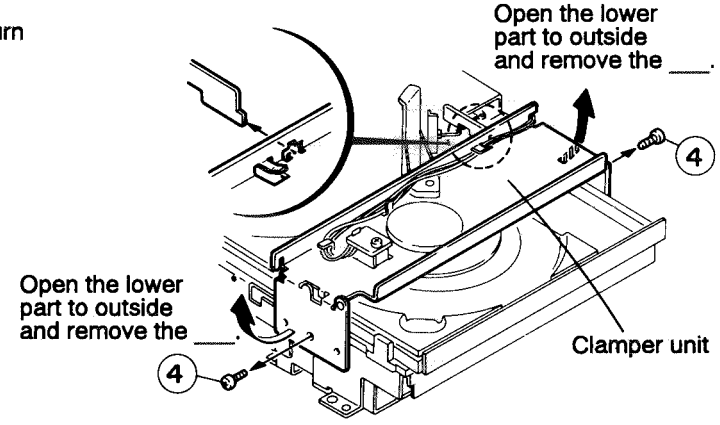


Fig. 2-11

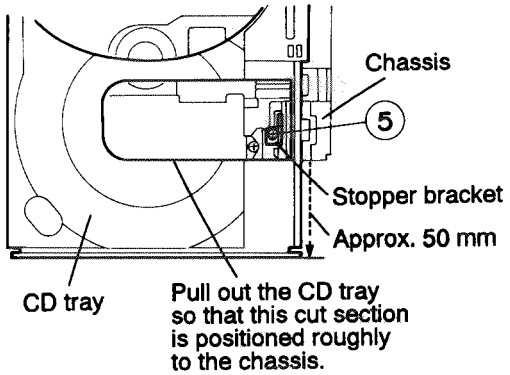


Fig. 2-12

3. Remove the pawl of the cover plate from the tray stopper. Then, the cover plate A can be moved closer to the cover plate B by means of spring action.

4. Set the changer unit to its normal position (by turning the unit to its initial position).

5. After fully pulling out the tray, remove the tip section on the right side of the tray (Disc base) from the stopper.

a: Pull out the tray while twisting it upward so as to make it possible to pull out the tray (Disc base) from above the slide switch (blue) lever. Then the chassis stopper section will be removed together with the tray at the same time.

b: Thus, the tray will be removed at the same time (The loading plate will be set free under this condition). For assembly, insert the tray while pulling up the tip on the right side of the tray so as to cross over the chassis stopper section. Then, it will be made possible to smoothly insert the slide switch section.

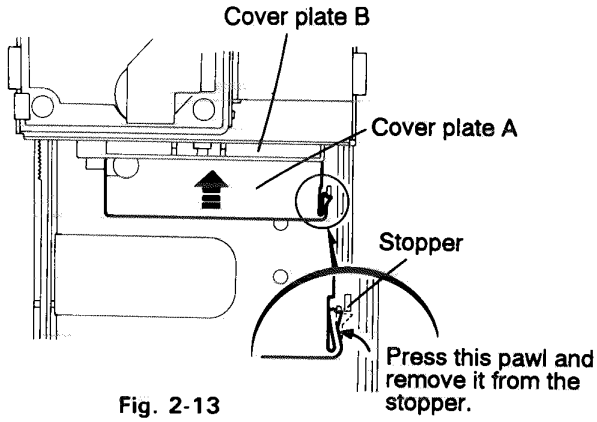


Fig. 2-13

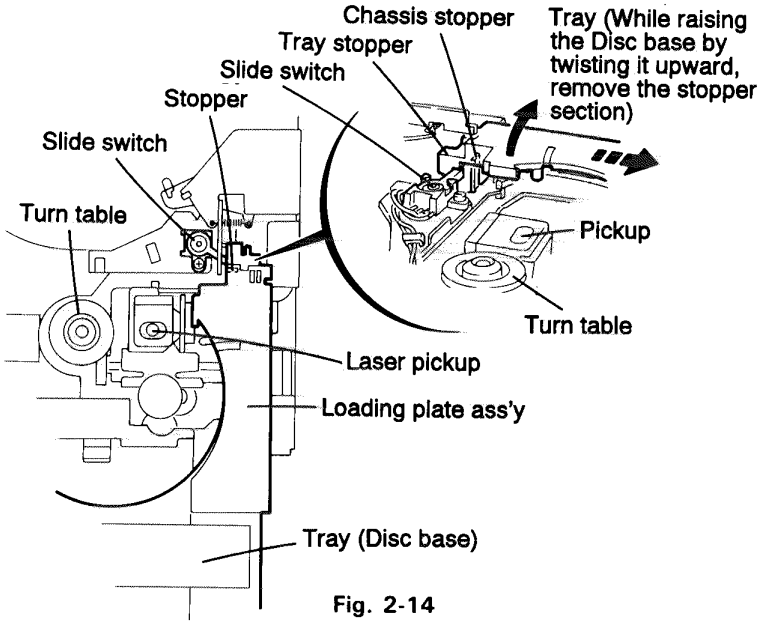


Fig. 2-14

◆ Cover Plate Ass'y

1. Remove the one screw ⑥ retaining the cover plate Ass'y.

2. While sliding the cover plate toward the right side, remove the cover plate ass'y while raising the right side of the cover plate (screw setting position).

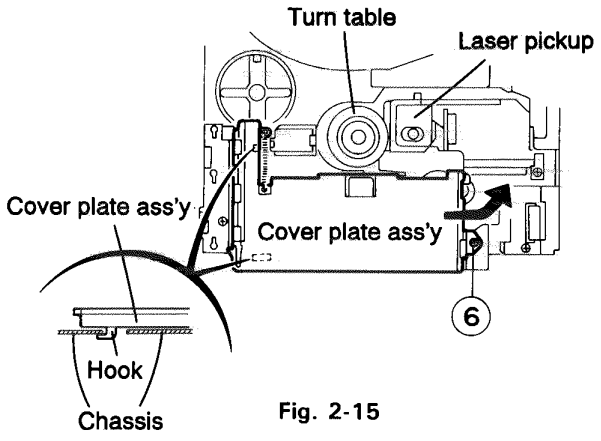


Fig. 2-15

◆ CD Mechanism Unit

1. From the right side of the changer chassis, remove the two screws ⑦ retaining the CD mechanism unit.

2. While pressing the two stopper sections (a) of the CD mechanism holder toward inside, remove the stopper.

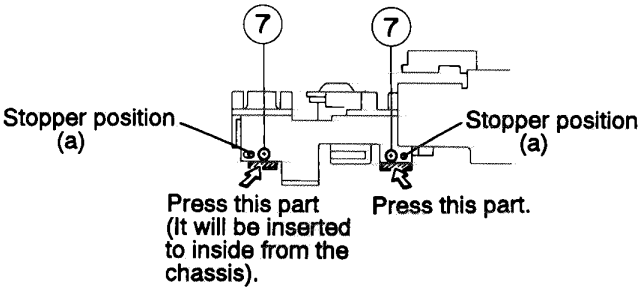


Fig. 2-16

3. In case the CD mechanism unit cannot be removed smoothly, turn the gear G4 (L) in the counterclock-wise direction. Then, the CD mechanism unit will be removed smoothly.

<Assembly>

1. Insert the CD mechanism holder boss on the left side of the CD mechanism unit into the groove of the gear G4 (L).
2. Set the stopper on the right side of the CD mechanism holder onto the chassis and fix the chassis with the related screws.

<Pickup Ass'y>

1. Remove the two right and left screws ⑧ retaining the pickup shaft stopper.
2. After moving the pickup to outside while turning the gear, pull out the shaft and remove the pickup while turning the pickup at the corner in clockwise direction.

◆Gear Chassis Unit

1. From the upper front surface, remove the one screw ⑨ retaining the chassis unit.
2. From the left side surface, remove the two screws ⑩ retaining the chassis unit.
3. For protecting the switch, remove the one screw ⑪ retaining the switch P.C. board from the back side.
4. From the upper surface, remove the two screws ⑫ retaining the right side of the gear chassis.

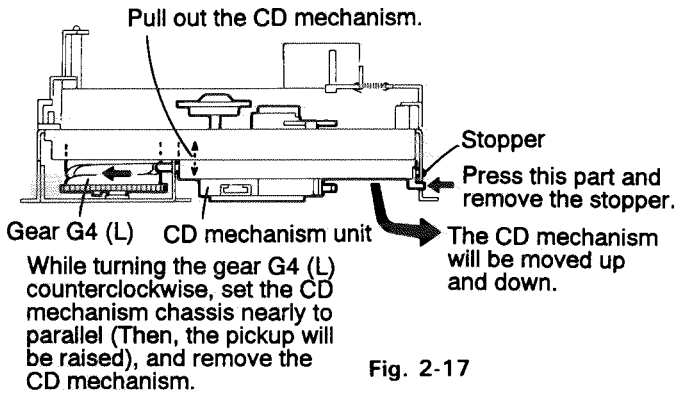

Pull out the CD mechanism.
Stopper
Press this part and remove the stopper.
Gear G4 (L)
CD mechanism unit
The CD mechanism will be moved up and down.
While turning the gear G4 (L) counterclockwise, set the CD mechanism chassis nearly to parallel (Then, the pickup will be raised), and remove the CD mechanism.

Fig. 2-17

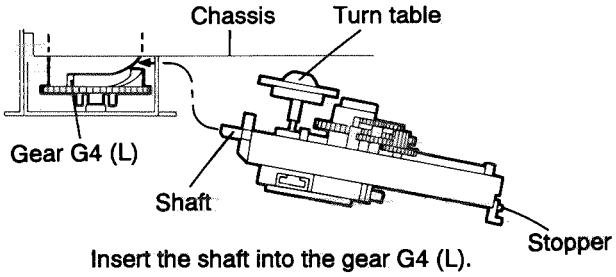


Fig. 2-18

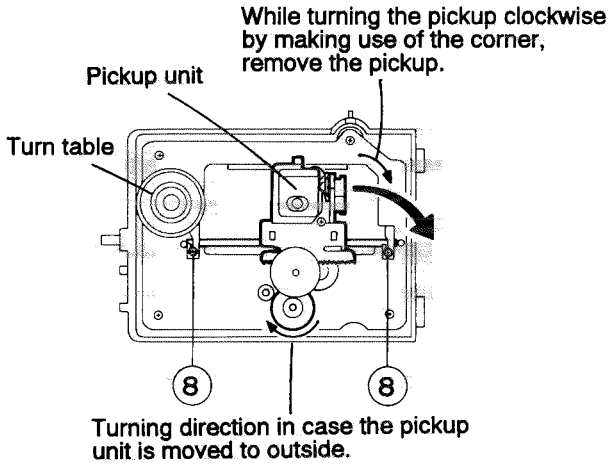

While turning the pickup clockwise by making use of the corner, remove the pickup.
Pickup unit
Turn table
8
8
Turning direction in case the pickup unit is moved to outside.

Fig. 2-19

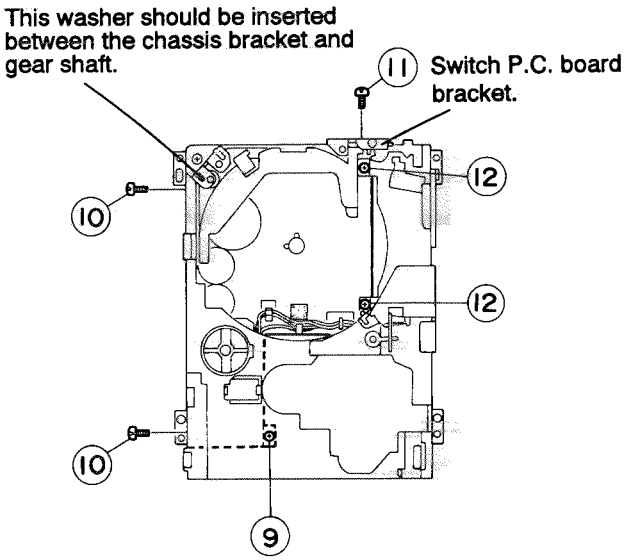


Fig. 2-20

■ Cassette mechanism section

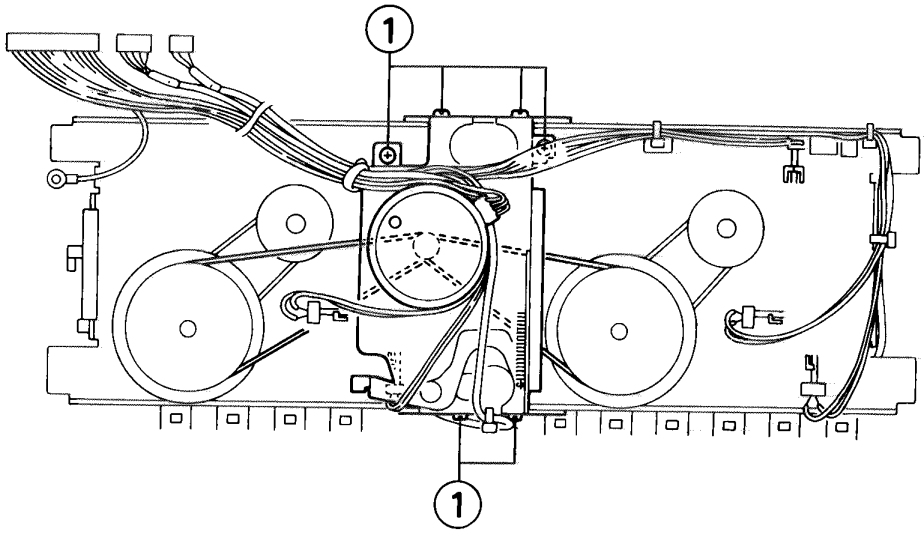


Fig. 2-21

■ Capstan motor (Fig. 2-21, Fig. 2-22)

1. Remove the Front panel assembly.(Refer to the article"Front panel assembly"appearing on a previous page)
2. Remove the Cassette mechanism assembly.(Refer to the article"Cassette mechanism assembly" appearing on a previous page)
3. Remove the Main board(Refer to the article "Main board" appearing on a previous page.)
4. Remove the Cassette mechanism. (Refer to the artticle" Cassette mechanism"appearing on a pre vious page.)
5. Remove six screws ① retaining the motor bracket from the back of the cassette mechanism.
6. Take out the main belt from the flywheel assembly of mechanism A and B.
7. Remove six screws ② retaining the Capstan motor from the back of the cassette mechanism.

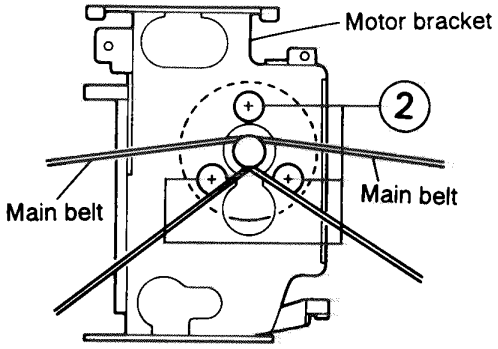


Fig. 2-22

■ Eject slide lever (Fig. 2-23)

1. Place the cassette mechanism back side frontward and disengage the stopper arm ⓑ of the Eject slide lever by pressing it inwards through the opening of the chasssis with a small screwdriver as shown in Fig. 2-23.
2. Disengage the Eject slide lever in the direction of arrow ⓒ.

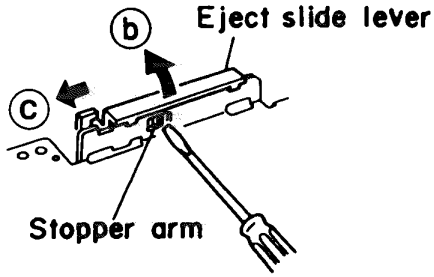


Fig. 2-23

■ Leaf switch (Fig. 2-24)

Press the leaf switch in the direction of the arrow ⓓ and then remove it in the direction of the arrow ⓔ refering to Fig. 2-24.

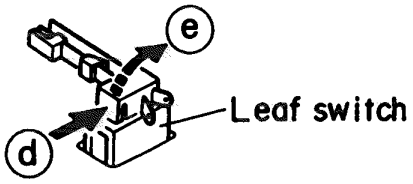


Fig. 2-24

■ **Pinch roller assembly (Fig. 2-25)**

1. Full out the stopper protruding from the base assembly in the direction of the arrow ⓕ to remove it from the pinch roller assembly.
2. Then, pull out the pinch roller assembly in the direction of the arrow ⓖ.

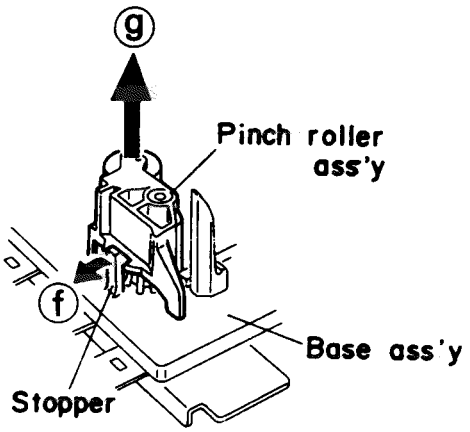


Fig. 2-25

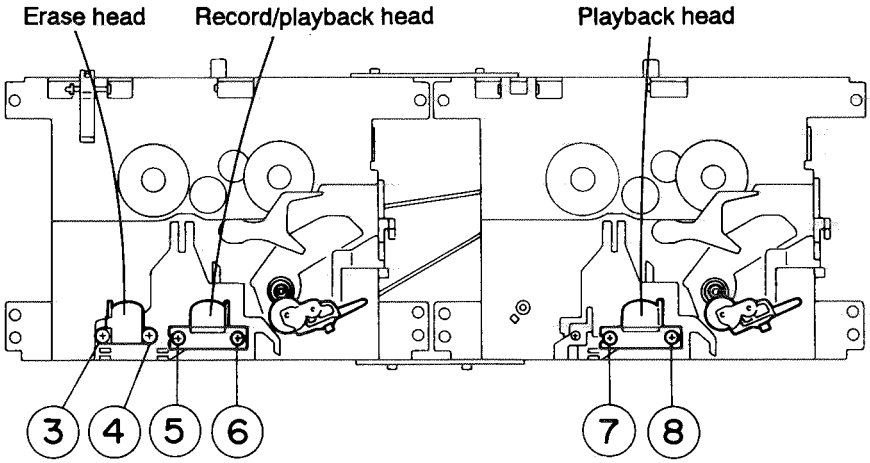


Fig. 2-26

■ **Record/Playback head & Erase head (Fig. 2-26, Fig. 2-27)**

1. Remove two screws ⑤ and ⑥ retaining the Record/ Playback head of mechanism A.
2. Remove two screws ⑦ and ⑧ retaining the Playback head of mechanism B.
3. Remove two screws ③ and ④ retaining the erase head.

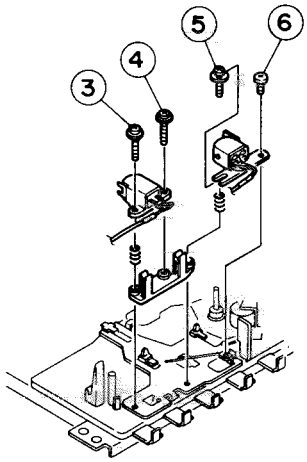


Fig. 2-27

■ **Flywheel assembly (Fig. 2-28)**

1. E. whasher retaining the flywheel assembly in the direction of arrow ⓙ.
2. Pull the flywheel assembly out of the back side of the cassette mechanism in the direction of the arrow ⓚ.

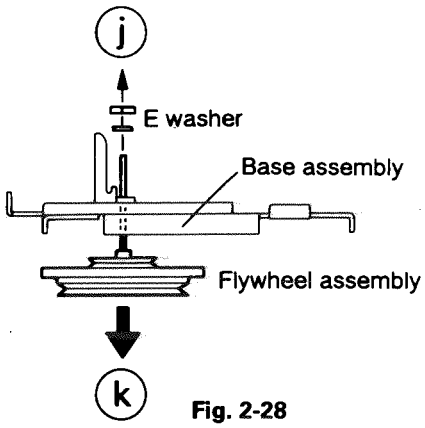


Fig. 2-28

3 Main Adjustment

■ Test Instruments required of adjustment

1. Low frequency oscillator
   (oscillation frequency: 50Hz to 20kHz)
   (Output : 0 dBs with 60 Ω terminator)
2. Attenuator(Impedance : 600 Ω)
3. Test Tapes
   VTT712 (VT712) ····· For tape speed,wow and flutter measurement
   VTT724 (VT724) ····· For play back output level
   VTT739 (VT739) ····· For playback frequency response check
   VTT703 (VT703) ····· For head azimuth measurement
4. Electronic voltmeter, Distortion meter
5. Resistor...600 Ω for attenuator matching
6. Torque gauge····· Cassette type for CTG – N mechanism adjustment
7. Wow and Flutter meter , Frequency counter
8. Blank tape····· Normal:UR,Chrome: AC225

■ Measuring conditions (Amplifier section)

Supply voltage ···· AC110V to 127V/220V to 240V(50/60Hz)
Reference output : Speaker ····· 0 dBs (0.775V) / 3 Ω (Volume Level: 19)
: Headphone · – 10 dBs (0.245V)/ 32 Ω

● Standard position of functionswitches

Function switch ····· TAPE
Mode switch ····· STEREO

● Standard position of volume control

Sound ····· Flat position
AHB PRO ····· OFF
Main volume adjust ····· 0 dBs Speaker out(Vol.19)
Headphone out (Vol. 20)
Beat cut switch ····· Cut1
Standard test frequency ····· 1 kHz
; unless otherwise specified.
Reference input level ····· TP(CN402) : – 20dBs
Input for REC/PB, Check &measuring ····· CN301
: –20 dBs

● Test remarks

1. Negative side of the input and output on the testing set, that ought to be separately to each other, and then bear in mind there connection the testing set with 2 channeles Electronic voltmeter, the negative side never connect commonly.
2. Replaced output load with a dummy and that lead wire to be used as big as posible.
3. Attach top cover when measuring and connect filter shown below Fig. 1 to V. meter.

■ Measuring condition (Radio section)

Refer to rating source ····· Tuner+B : DC 5.7V
Reference output ····· Speaker : 20mW(0.245 V) / 3 Ω
Headphone : 0.11 mW (0.06 V)/32 Ω
AM frequency ····· 400Hz modulation 30%
FM frequency ····· 400Hz modulation frequency deviation 22.5kHz

● Standard position of switches and controllers

Function ····· RADIO
Mode ····· STEREO

● Careful points for adjustment

1. Connect 30 pF capacitor and 33 k Ω resistor to the output side of the IF sweeper in series while 0.082 μF capacitor and 100k Ω resistor to the input side in series.
2. Set output level of the IF sweeper as minimum as adjustable.
3. RF Alignment order
   Procedure of the steps of tracking should be kept.

◎Test point : CN402 (Top view)

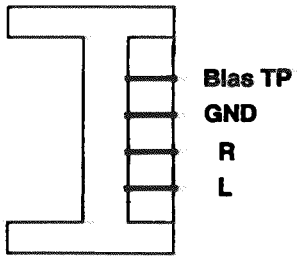


Fig. 3 – 1

■ Arrangement of adjustment position

■ Cassette mechanism

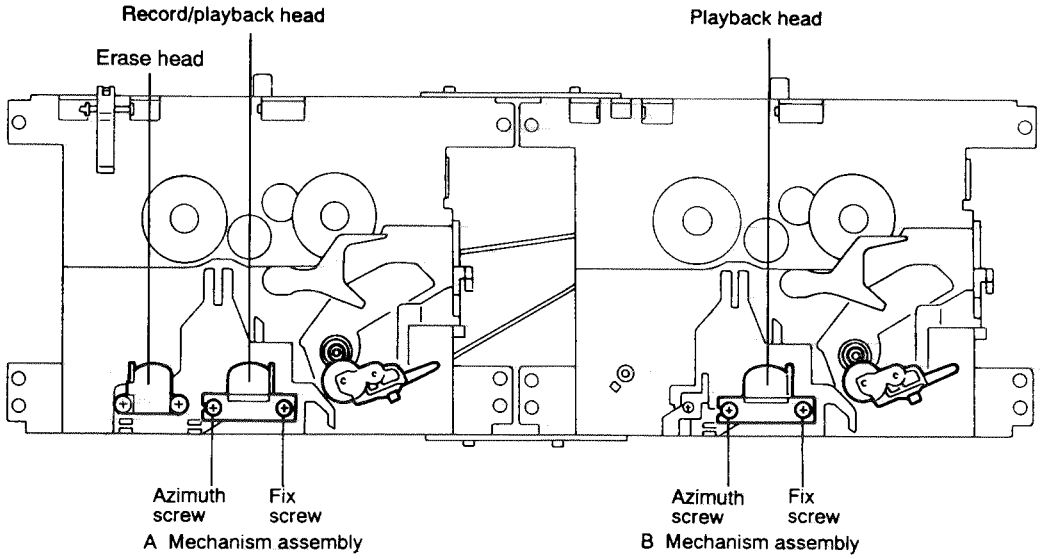


Fig. 3-2

■ Tuner board

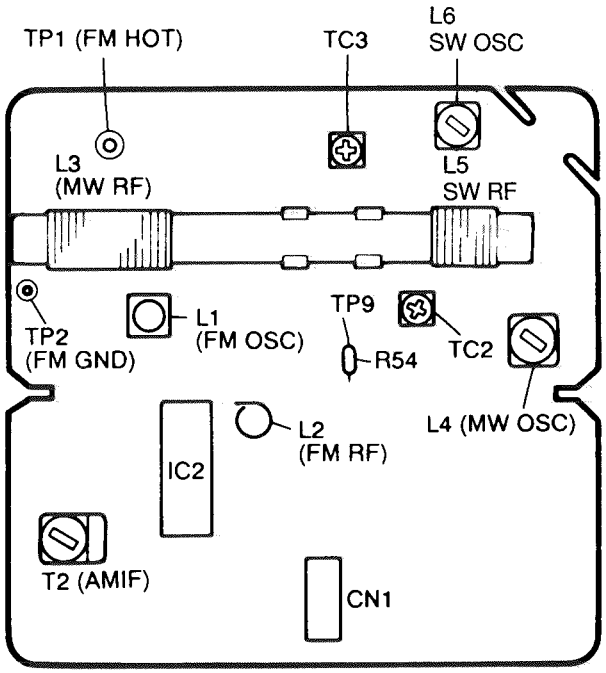


Fig. 3 – 3

■ Main board

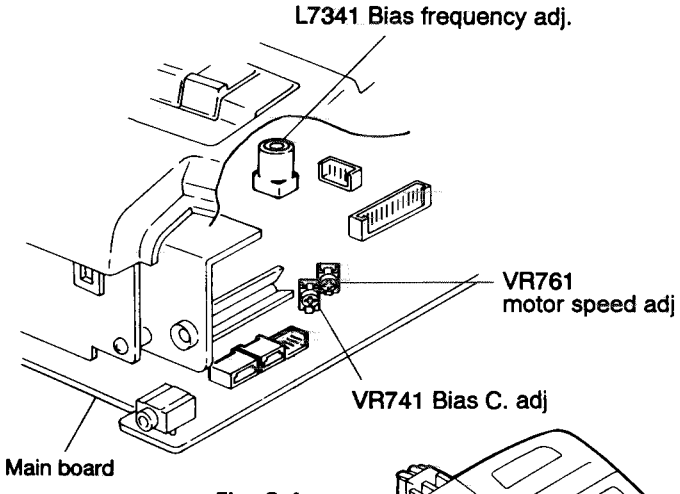


Fig. 3-4

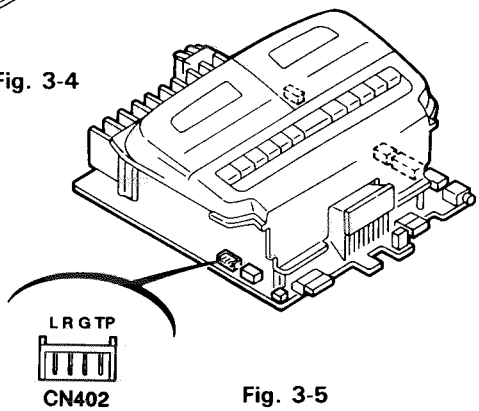
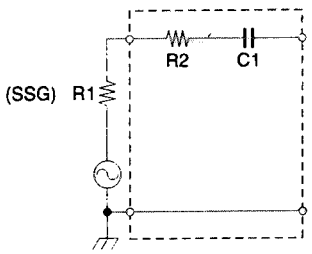


Fig. 3-5

Dummy antenna
(for short wave)



R1 + R2 = 80 Ω
R1: output impedance of SSG (50 Ω)
C1:

Rod L (cm)	L > 90	90 ≦ L ≦ 60	L < 60
C1 (PF)	10	8	6

■ Cassette and amplifier section

Item	Conbitions	Adjustment & Confirmation Methods	Stand. values	Adjust
Head azimuth adjustmentf (A, B mechanism)	• Test tape : VTT703(10KHZ) • Output terminal for measurement : Headphone • Input terminal for measurement : CN301	* Adjust the head azimuth screw only when the head is replaced. ① Playback test tape VTT703 (10kHz). ② Adjust the head azmiuth so that the phase difference is minimum (Within 2dB of the peak level of play output.) After adjustment apply the screw locking adhesive to the head azimuth screw more than a halfl arund the screw head.	Within 2dB of the peak lebel Minimum phase difference	Head azimuth adjusting screw
Tape speed adjustment and wow & Flutter checking (A, B mechanism)	• Tast tape : VTT712 (3kHz) • Output terminal for measurement : Headphone	① When playing test tape VTT712 (3kHz). ② Adjust VR761 so that the frequency counter reading is 2990Hz~3010Hz. ③ Wow & Flutter should be less than 0.4% (JIS UNWTD).	• Tapre speed : 2990Hz~ 3010Hz Wow & Flutter : Less than 0.4% (JIS UNWTD)	VR761
Play back output level checking (A, B mechanism)	• Tast tape : VTT724 (1lHZ) • Output terminal for measurement : Headphone	① When Playback the test tape VTT724 (1kHz), the output level at headphone is − 24dB ± 3dB at 1kHz. ② Deviation L and R : less than 3dB.	− 24dB ± 3dB	
Playback frequency response checking (A, B mechanism)	• Tast tape : VTT739 • Output terminal for measurement : Headphone	When playback the test tape VTT739, response should be − 5dB ± 4dB at 63Hz and 1kHz, +5dB ± 4dB at 10kHz and 1kHz with respect to 1kHz.	63Hz and 1kHz : − 5dB ± 4dB 10kHz and 1kHz +5dB ± 4dB	
Adjusting the bias oscillation frequency	Test tape: AC − 513 Measured output pin: Oscillation coil secondary side (erase)	① Connect a frequency counter (with a 1M Ω resistor inserted in seriesl)to the L7341 secondary side erase pin. ② Load the test tape (AC − 513)in the deck and set to Record − Pause mode. ③ Adjust the L7341 so that the frequency counter level reads 101.1kHz ± 1lHz in Record mode.	101.1kHz ± 1kHz	L7341
Record/playback frequency response adjustment (A mechanism)	• Reference frequency : 1kHz, 10kHz (Ref. − 20dB) • Test tape: AC224 • Output terminal for measurement : CN301	① Record and playback the 1kHz reference frequency and 10kHz signal and check at treminal CN301. ② Adjust the VRA41 so that record and playback frequency response with 1kHz and 10kHz at CN301 is ± 0dB ± 1dB. ③ Comfirm that the frequency counter reading is 101.0kHz ± 0.15kHz. If the reading is out of this range, adjust L7341.	+5dB$^{+2}_{-1}$dB 101.1kHz ± 0.15kHz	VR741 L7341
Record/playback sensitivity check	• Test tape: VTT724, AC224	While recording/playing back sn input signal of the reference leve (REC level), confirm that difference between the REC/PB level of the input signal and PB level of the VTT724 test tape is within 0 ± 3dB.	0 ± 3dB	

■ Tuner section

FM, AM IF adjustment : Since a solid IF is being used, no adjustment is required.
MPX adjustment : Since a ceramic resonator is being used, no adjustment is required.
FM tracking adjustment : Since a fixed coil is being used, no adjustment is required.

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
AM Tracking adjustment	• Band: ÅM • Signal input Standard loop antenna: TP9 • Signal output: CN1	① Confirm so that the CN1 output is maximum when 1602 kHz (preset 2) is received from the AM signal generator. ② Incase voltage at TP9 is more than 5.0 V adjust L4 to obtain 5.0 ± 0.1 V at TP9. ③ Adjust L3 so that the CN1 output is maximum when 603 kHz (preset 3) is received from the AM signal generator. ④ Adjust TC2 so that the CN1 output is maximum when 1404 kHz (preset 4) is received from the AM signal generator. ⑤ Repeat the item ④, ⑤, adjust for no further improvement.	Output level: Maximum 5.0 ± 0.1 V at TP9 Output level: Maximum Output level: Maximum	 L4 L3 TC2 L3, TC2
SW Tracking adjustment	• Band: SW • Signal input Dummy antenna • Test point: TP9 signal input TP1: positive TP2: negative • Signal output: CN1	① Adjust L6 so that the CN1 output is maximum when 17.95 MHz (preset 2) is received from the SW signal generator. Adjust L6 to obtain 4.7 ± 0.02 V at TP9. ② Adjust L5 so that the CN1 output is maximum when 6 MHz (preset 3) is received from the SW signal generator. ③ Adjust TC3 so that the CN1 output maximum when 17 MHz (preset 4) is received from the SW signal generator. ④ Repeat the item ②, ③, adjust for no further improvement.	Output level: Maximum 1.1 ± 0.02 V at TP9 Output level: Maximum Output level: Maximum	L6 L5 TC3 L5, TC3

Manual step
9kHz : 531kHz to
10kHz : 530kHz to

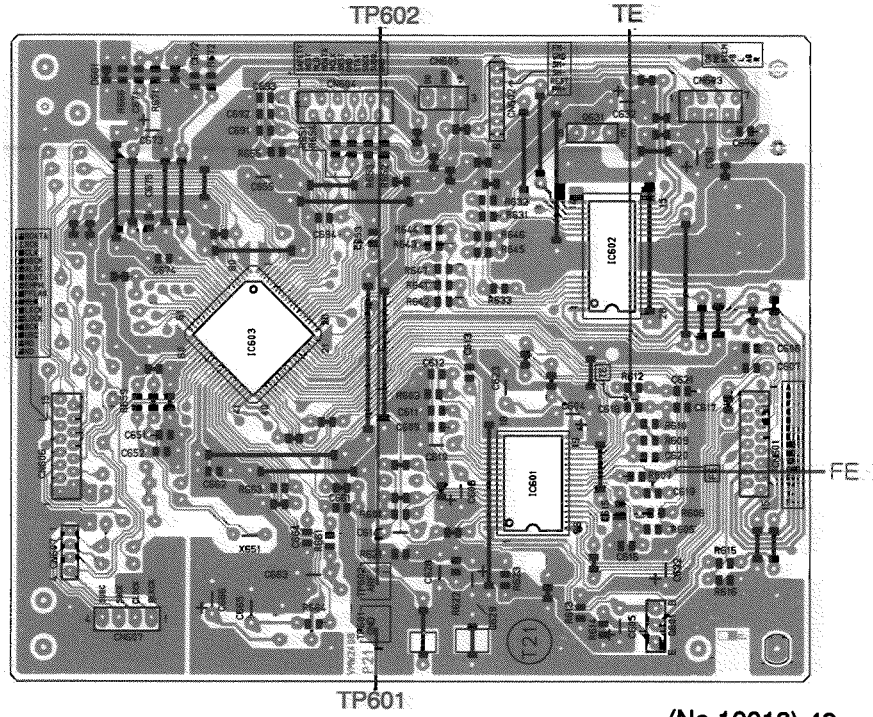
Preset frequency

Preset / Strep	P1	P2	P3	P4
9 kHz	531	1602	603	1404
10 kHz	530	1710	600	1500

■ 9kHz set
"condition of standby"
[POWER]+[DOWN] key pushing at sam time

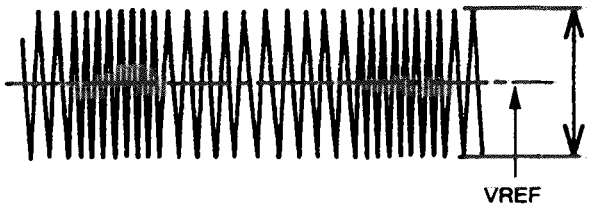
■ 10kHz set
"condition of standby"
[POWER]+[UP] key pushing at sam time

● Adjusting position of CD amplifier board



■ CD section

Items	Conditions	Adjustment and Confirmation	Standard Value	Adjusting
1. Checking jitter	Measurement equipment: Oscilloscope (jitter meter) Test points: TP601: ground side TP602: hot side	Connect the jitter meter between the TP601 and TP602, and check that the jitter meter reads 26 nsec. or less when playing back the test disc "Track 1".	26 nsec. or less	
2. Checking the RF level (eye pattern)	Measurement equipment: Oscilloscope TP601: ground side TP602: hot side	Connect the oscilloscope between the TP1 and TP2, and check that the peak-to-peak value of the oscilloscope waveform reads within 1.1 V ± 0.2 V when playing back the test disc "Track 1". Eye pattern waveform	1.1 V ± 0.2 V Check that the maximum level of this waveform is within the standard values and that the waveform is clearly visible.	
3. Checking the outermost area	CTC-1000	Select "Track 28" on the outer area of test disc directly and check that it begins playback smoothly and that there are no abnormal conditions such as a tracking error.		
4. Checking the pickup movement from the outer area to the inner area		Allow the pickup to skip over from the disc's outermost area to "Track 1" and check that it takes within 10 seconds for the player to enter Play mode.	Within 10 seconds	

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
Tracking offset adjustment	Test disc :CTS1000 Oscilloscope **Note 1** Adjust VR501 so that the waveform becomes vertically symmetrical to the reference voltage value of servo. **Note 2** The oscilloscope input should be DC – coupled. **Note 3** VREF: Ground level on the oscilloscope.	①Connect TP503 (TE) and TP501 (VREF) respectively to the hot and ground sides of the oscilloscope. ②Replay the test disc CTS1000. ③When TP504 and TP501 have been connected (Shorted) during replay, a tracking error signal will be emitted for about 3 sec. (Since the tracking error signal will be emitted at all times when the model with a test mode function is shifted to TEST mode, the adjustment can be performed more easily). ④Since the waveform of tracking error signal displayed by the oscilloscope goes up and down when VR501 has been adjusted, adjust VR501 so that the center of the waveform amplitude becomes a reference voltage value of servo(VREF). ⑤Repeat the steps ②–④ until the center of the waveform amplitude of tracking error signal becomes the reference voltage value of servo (This step is not necessary in the case of the model with test mode function). Tracking error signal  Adjust the waveform becomes vertically symmetrical to the reference voltage value of servo. VREF	Adjust the center of waveform amplitude to the reference voltage value of servo (VREF).	VR501

4 Wiring Connections

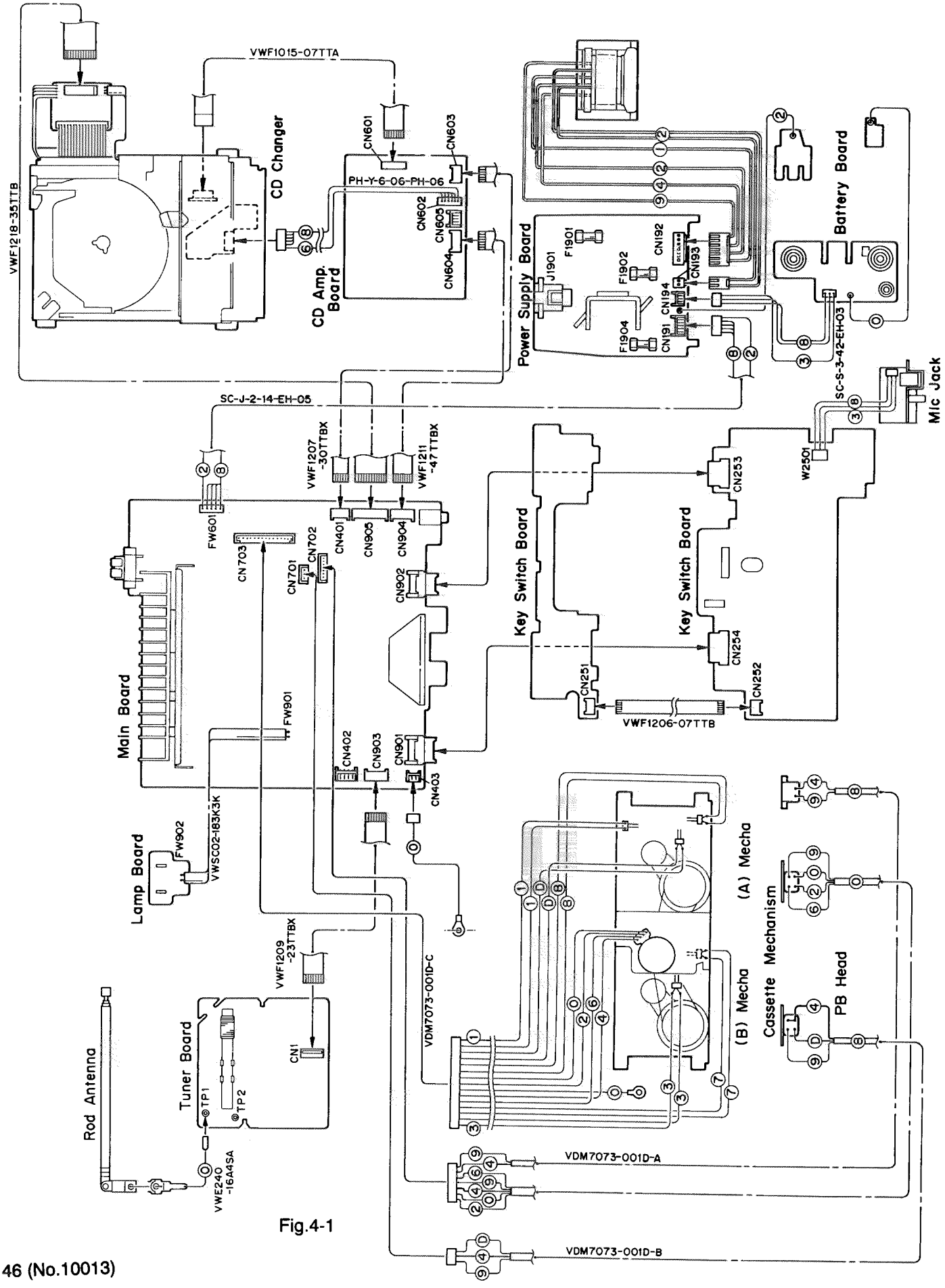


Fig.4-1

5 Troubleshooting

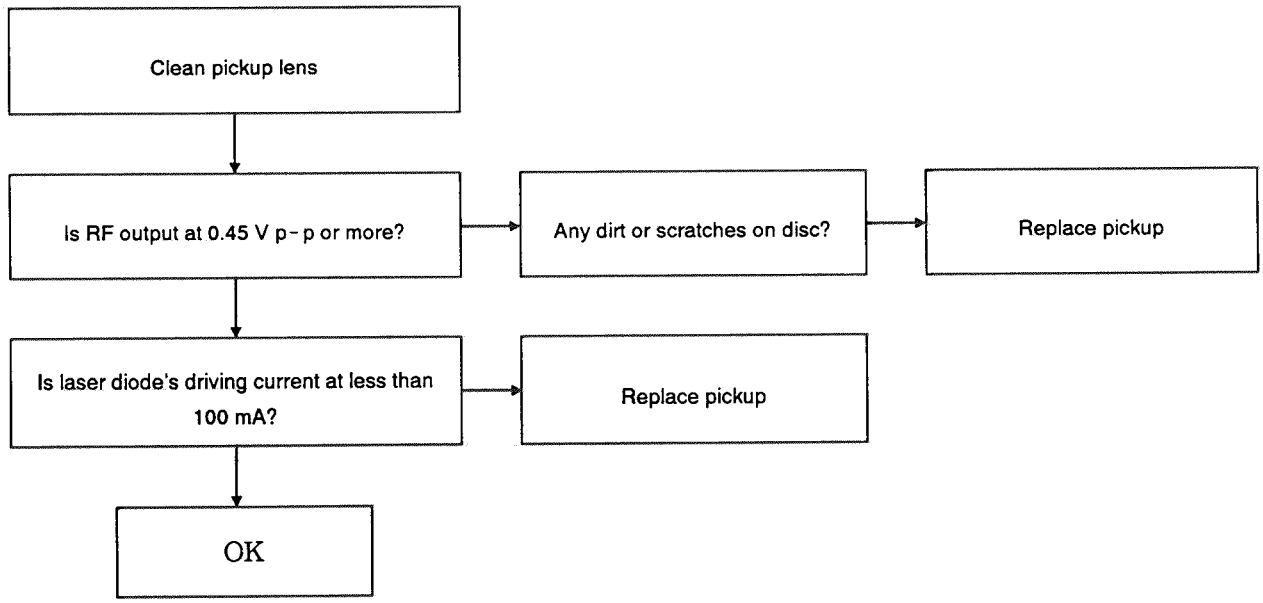
■ Pickup maintenance

(1) Checking the service life of laser diode

If a laser diode reaches the end of its service life, the following phenomena will show up. Similar symptoms may also appear when the pickuplens becomes too dirty. In this case, clean the lens.

1) The RF output (between IC601 ⑦ and ⑱ (GND)) lowers.
2) The driving current, necessary for the laser diode to emit lights, increases. (Calculate from the voltage level at both ends of the R614 at 10 Ω .)

◆ Following the flow chart shown below, check the service life.


Clean pickup lens
Is RF output at 0.45 V p-p or more?
Any dirt or scratches on disc?
Replace pickup
Is laser diode's driving current at less than 100 mA?
Replace pickup
OK

◆ How to measure laser diode's driving current

After connecting a voltmeter at both ends of the R614(10 Ω), measure the voltage during playback. If the voltage level is at 1.0 V or more, the service life of the laser diode has expired.

Laser diode's driving current (A)
= Voltage level at both ends of R614 (V)/10 (Ω)
When voltage level is at 1.0 V.
1.0 V/10 Ω = 0.1 A = 100 mA

Note:
The laser diode easily breaks down. Be sure to turn the power off before connecting a voltmeter.

◆HOW TO OPERATE THE CD SELF-DIAGNOSIS FUNCTION

◆The CD Self-diagnosis Function

If any malfunction occurs in the CD player, this system can be set to make an error code indication appear on the LCD to point out the defective parts. This efficiently helps service personnel find the causes of the malfunction.

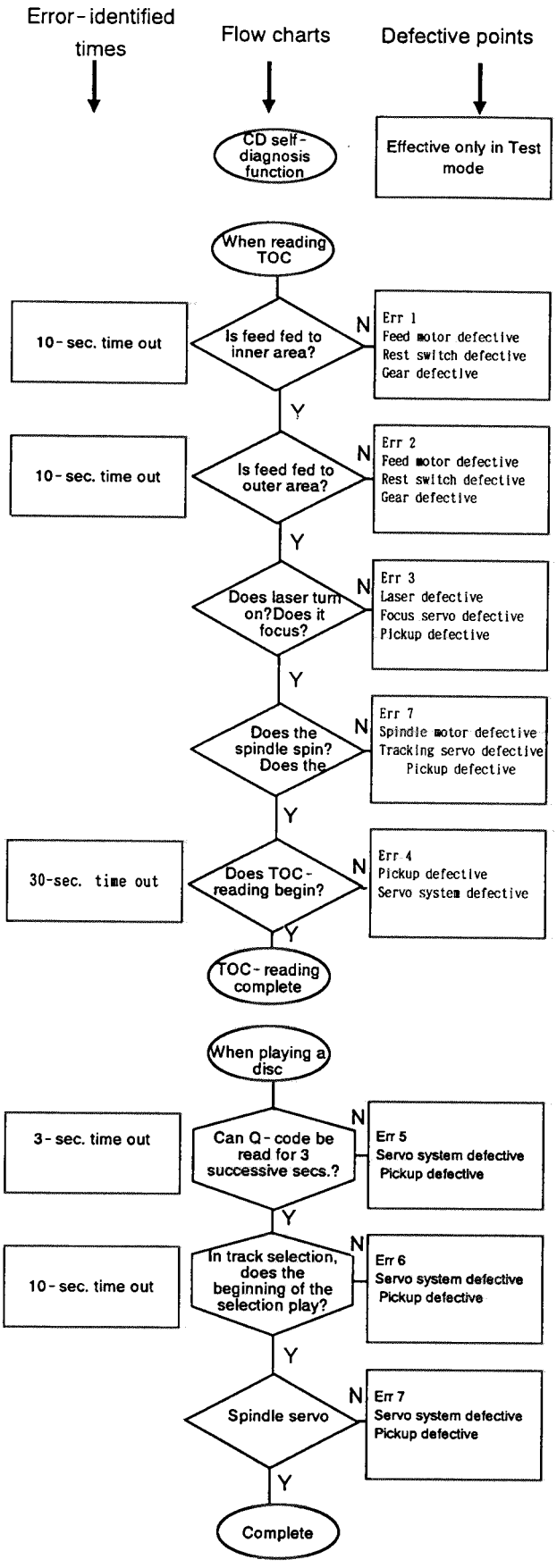
1. Operation

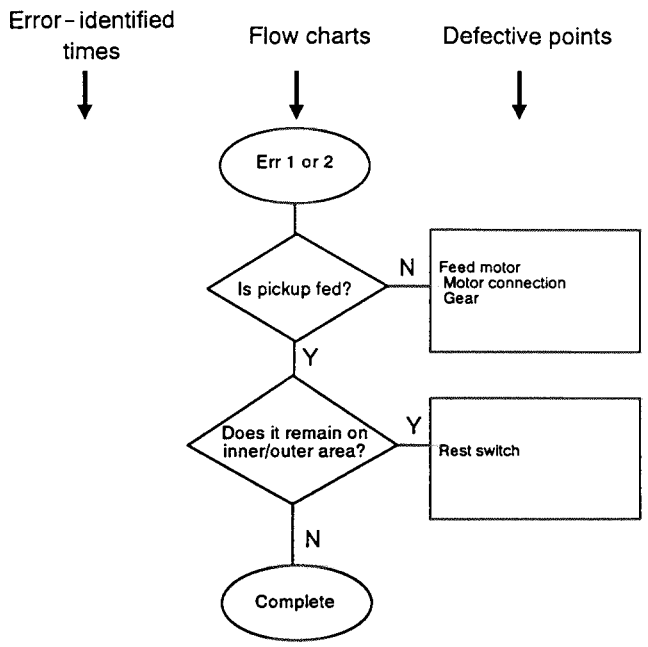
[1] Press the three [◀◀], [+10] and [POWER] buttons on the remote control to enter the Test mode. (Then the illuminating portions of the LCD all light up together. This indicates that the system has entered the Test mode.)

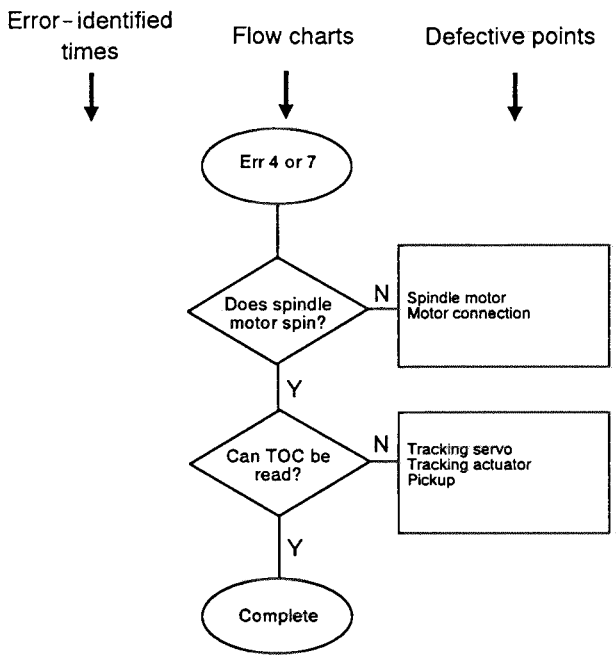
[2] Play a CD. If the operation is defective in any way, an error code should appear on the LCD.

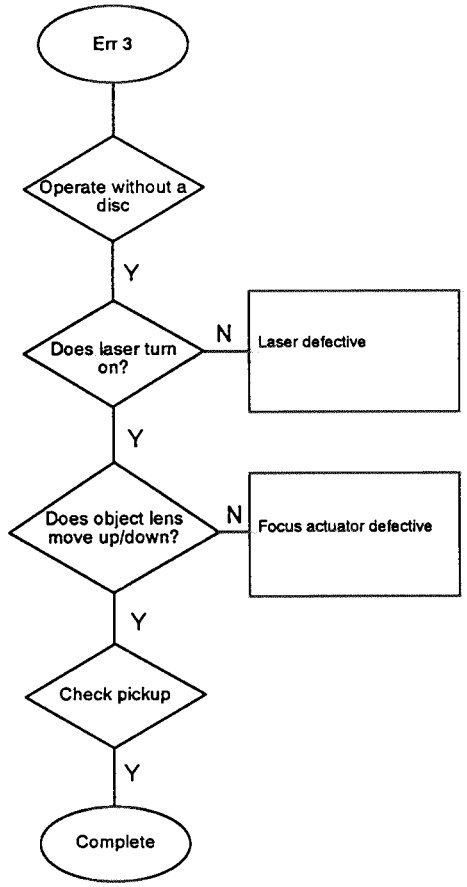
[3] Identify the point of malfunction in accordance with the error code displayed.

2. Error codes & defective points




Error-identified times
Flow charts
Defective points
Err 1 or 2
Is pickup fed?
N
Feed motor
Motor connection
Gear
Y
Does it remain on inner/outer area?
Y
Rest switch
N
Complete


Error-identified times
Flow charts
Defective points
Err 4 or 7
Does spindle motor spin?
N
Spindle motor
Motor connection
Y
Can TOC be read?
N
Tracking servo
Tracking actuator
Pickup
Y
Complete


Err 3
Operate without a disc
Y
Does laser turn on?
N
Laser defective
Y
Does object lens move up/down?
N
Focus actuator defective
Y
Check pickup
Y
Complete

◆ General

Power ON

Open CD door/tray, insert a disc & close the door/tray

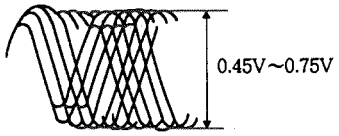
Is TOC displayed?

→ Proceed to READING TOC

Is playback possible?

→ Check circuits & connections related to:
IC601 ⑩, ⑯, ㉔, ㉙, ㉚
IC603 ㉒, ㉚, ㉛, ㉟, ㊲, ㊹, ㊺, ㊻, ㊼, ㊽

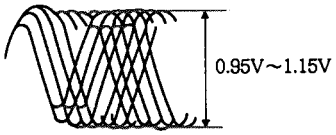
Is RF waveform between IC601 ⑦ & ⑱ (GND) normal?



Waveform must be less blurred

→ Pickup defective
See PICKUP MAINTENANCE

Is ARF waveform between TP601(GND) & TP602(ARF) normal?



aveform must be less blurred

→ Check circuits & connections related to IC601 ⑥, ⑦, ⑧, ⑨, ⑩

→ IC601 defective

re track select & search executed properly?

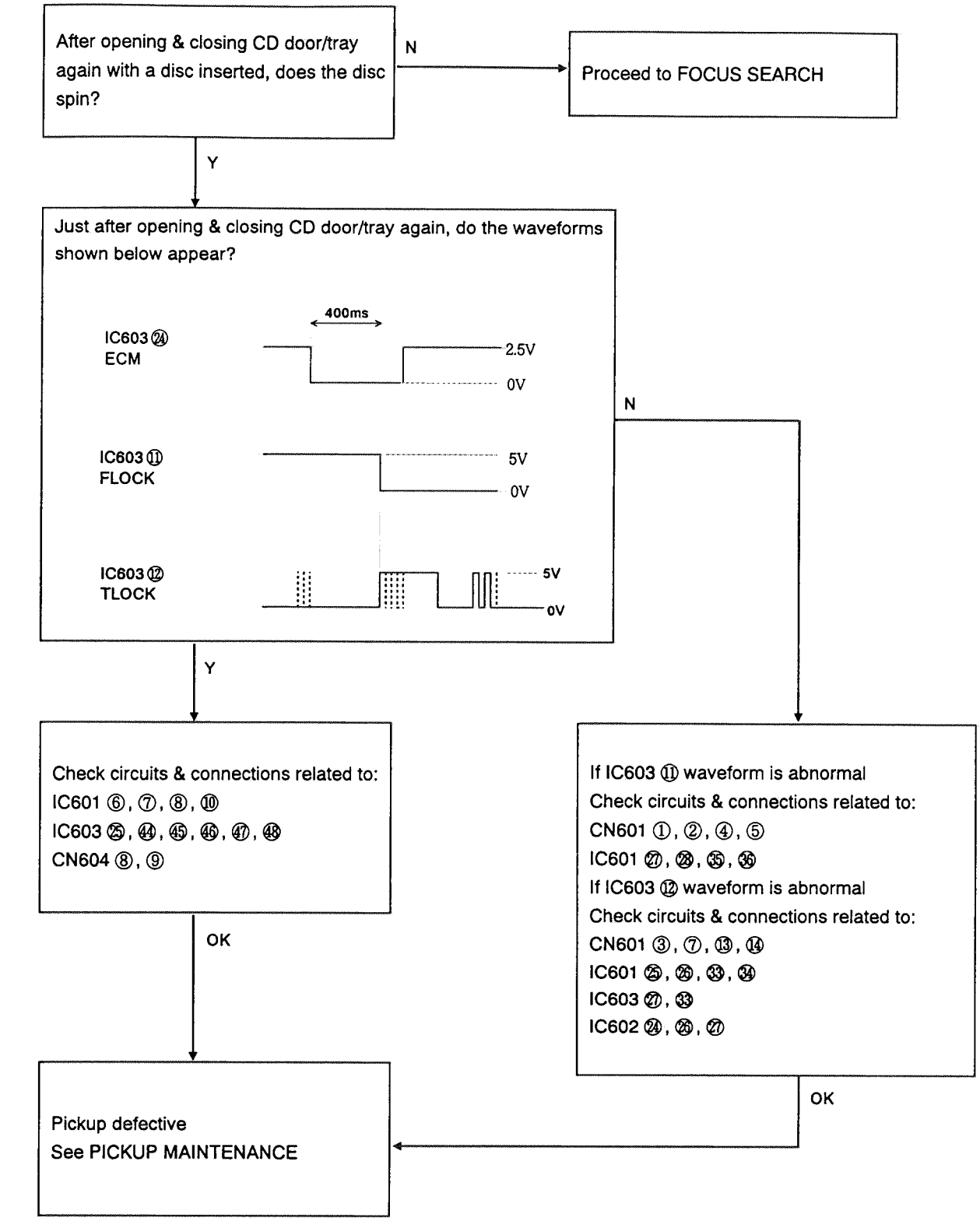
Does playback sound normal?

→ Check circuits & connections related to:IC603 ⑯, ⑦③, ⑦④, ⑦⑤
CN603 ⑤, ⑥, ⑦

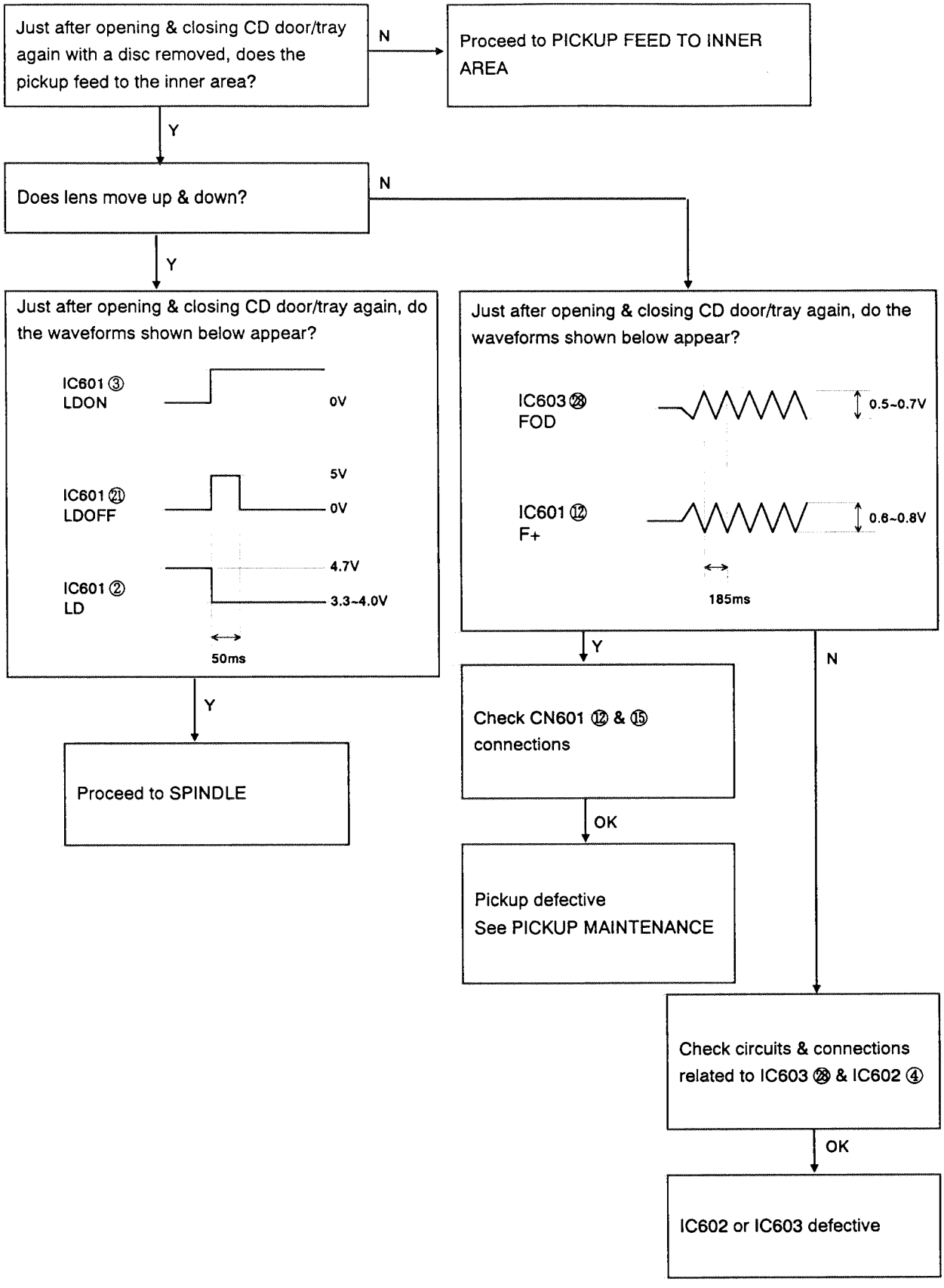
→ IC603 defective

Normal

◆ Reading TOC


After opening & closing CD door/tray again with a disc inserted, does the disc spin?
N
Proceed to FOCUS SEARCH
Y
Just after opening & closing CD door/tray again, do the waveforms shown below appear?
400ms
IC603 ㉔
ECM
2.5V
0V
IC603 ⑪
FLOCK
5V
0V
IC603 ⑫
TLOCK
5V
0V
N
Y
Check circuits & connections related to:
IC601 ⑥, ⑦, ⑧, ⑩
IC603 ㉕, ㊹, ㊺, ㊻, ㊼, ㊽
CN604 ⑧, ⑨
If IC603 ⑪ waveform is abnormal
Check circuits & connections related to:
CN601 ①, ②, ④, ⑤
IC601 ㉗, ㉘, ㉟, ㊱
If IC603 ⑫ waveform is abnormal
Check circuits & connections related to:
CN601 ③, ⑦, ⑬, ⑭
IC601 ㉕, ㉖, ㉝, ㉞
IC603 ㉗, ㉝
IC602 ㉔, ㉖, ㉗
OK
OK
Pickup defective
See PICKUP MAINTENANCE

◆ Focus search



◆ Pickup feed to inner area

Check CN602, CN603, CN604 connections

OK

Just after opening & closing CD door/tray again, is 6 - 7 V supplied from Q631 Emitter Terminal?

N → Check CD regulator circuit on amp PC board

Y

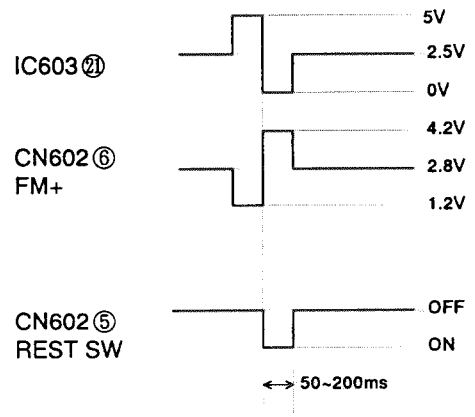
Just after opening & closing CD door/tray again, is 5 V supplied from Q631 Corrector Terminal?

→ Check circuits & connections related to Q631 & IC602 ⑤, ⑥

OK → Q631 or IC602 defective

Y

Just after opening & closing CD door/tray again, do the waveforms shown below appear?

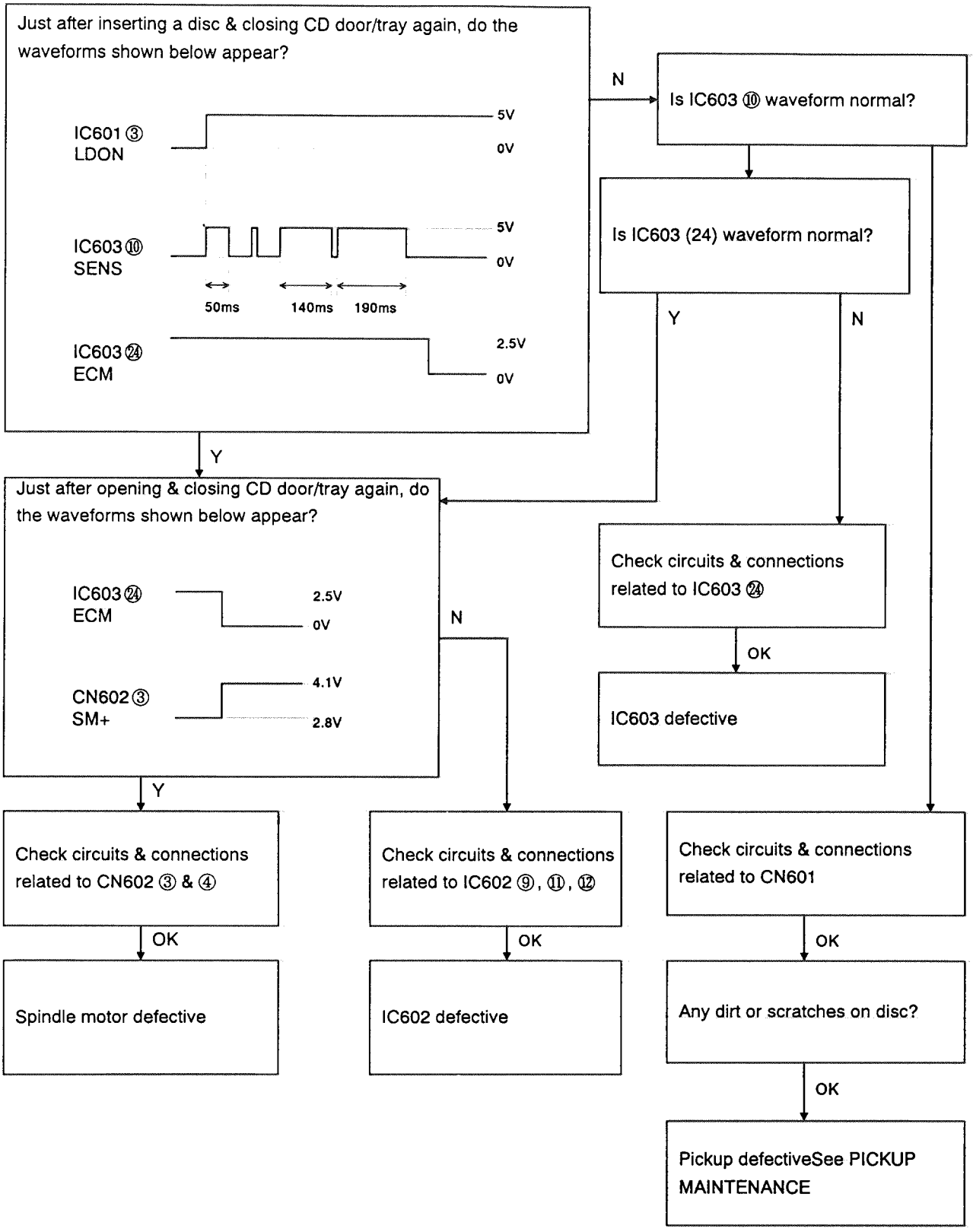


N → Check circuits & connections related to:
CN604
IC603 ㉑
IC602 ⑰, ⑱, ⑳
CN602 ①, ②, ⑤, ⑥

OK → Microcomputer or IC603 or IC602 defective

Y → Normal

◆ Spindle


Just after inserting a disc & closing CD door/tray again, do the waveforms shown below appear?
IC601 ③ LDON
5V
0V
IC603 ⑩ SENS
5V
0V
50ms
140ms
190ms
IC603 ㉔ ECM
2.5V
0V
N
Is IC603 ⑩ waveform normal?
Is IC603 (24) waveform normal?
Y
N
Y
Just after opening & closing CD door/tray again, do the waveforms shown below appear?
IC603 ㉔ ECM
2.5V
0V
CN602 ③ SM+
4.1V
2.8V
N
Check circuits & connections related to IC603 ㉔
OK
IC603 defective
Y
Check circuits & connections related to CN602 ③ & ④
OK
Spindle motor defective
Check circuits & connections related to IC602 ⑨, ⑪, ⑫
OK
IC602 defective
Check circuits & connections related to CN601
OK
Any dirt or scratches on disc?
OK
Pickup defectiveSee PICKUP MAINTENANCE

■ Description of Error Display/Indication

In addition to the normal functions, the service test modes have been incorporated in this model for confirmation and adjustment as described below:

1. Setting of the Service Test Mode

◆ Setting Method

After the power supply has been turned on, it is possible to set this model to the service test mode from the normal function conditions:
When the three [POWER], [■ /CLEAR] and [+10] buttons on the remote controller are pressed at the same time, this model will be set to the test mode. When this model has been set to the test mode, all of the LCDs will be turned on.

◆ Release of setting

When this model has been set to the test mode, press the three [POWER], [■ /CLEAR] and [+10] buttons at the same time, set this model to the backup mode or reset this model. Then, the test mode will be released.

2. Self-Diagnosis Function of CD Servo

When any error has occurred, either of the following error codes will be displayed depending on the contents of the error:

1) Err 1: Failure to turn on the reset switch (Internal peripheral feeding time-out)
2) Err 2: Failure to turn off the reset switch (Outer peripheral feeding time-out)
3) Err 3: Focusing failure
4) Err 4: TOC reading failure
5) Err 5: Failure to read the Q code continuously for 3 seconds
6) Err 6: Failure to locate the beginning of music when selecting a music

3. CD Running Mode

When the tower supply has been turned on, press the three [POWER], [■ /CLEAR] and [+10] buttons at the same time. Then, this model will be set to the CD running mode.

[Play the innermost and outermost peripherals of the respective CDs, and repeat this step for all of the ten discs].
Play TRACK 1 of DISC 1 for 30 sec. ➡ Play the outermost peripheral for 30 sec. ➡ OPEN ➡ Stop for 3 sec. ➡ CLOSE ➡
Play TRACK 1 of DISC 2 for 30 sec. ➡ Play the outermost peripheral for 30 sec. ➡ OPEN ➡ Stop for 3 sec. ➡ CLOSE ➡ ⬇
⬇
Play TRACK 1 of DISC 10 for 30 sec. ➡ Play the outermost peripheral for 30 sec. ➡ OPEN ➡ Stop for 3 sec. ➡ CLOSE ➡
Play TRACK 1 of DISC 1 for 30 sec. ➡ Play the outermost peripheral for 30 sec. ➡ OPEN ➡ Stop for 3 sec. ➡ CLOSE ➡

Then, repeat the above steps up to DISC10.
When the [UP] or [DOWN] button has been pressed, the process from playing TRACK 1 of DISC through to [CLOSE] of DISC 10 will be counted and displayed as one time. The process halfway the step is disregarded and displayed accordingly. The counted data will be displayed regardless of whether this model is in action or in shutdown.
[Counting example]: 000055...
This indicates that the above process has been repeated fifty-five times. The counted data will be stored as far as this model has been set to the service test mode. When this model has been restarted, however, this counting operation will be started newly after resetting. This model will be reset when the test mode has been turned off.
The counting operation will be stopped immediately when any error has occurred.

4. When the self-diagnosis function of the CD changer is in trouble, the following items will be displayed (under the service test mode):

1. In case the function is not restored even after executing the retry action, then the motor will immediately be stopped and the solenoid be turned off.
2. Prior to restarting after occurrence of any error, initialize the self-diagnosis function (this model).

LED display

1. The error disc No. will be displayed to indicate in which disc the error has occurred.
2. In case the disc case is being transferred, to which disc (a target disc) the disc case is being transferred will be indicated.

LCD display

OPEn	: The [OPEN] switch is not turned on.
CLOSE	: The [CLOSE] switch is not turned off.In this case, the [CLOSE] switch would have been turned off by other than the [OPEN] action.
UP	: The [UP] switch is not turned on.
dOWn	: The [DOWN] switch is not turned on.
SOL	: The [UP/DOWN] switch has been turned off when turning on the [SOLENOID] switch.
OP -- CL	: Sequence error of loading plate photo sensor. OPEN → LOAD (CLOSE)
CL -- UL	: LOAD (CLOSE) → UNLOAD
UL -- CL	: UNLOAD → LOAD
UnLOAd	: A disc is judged to have been left in the PU during unloading by means of 8 cm PS.
dCL	: The [DISVC CASE] limit switch is not turned on.
dCL -- F	: The [DISC CASE] limit switch is not turned off.
CASE	: Counting error of [DISC CASE] photo sensor

6 Block Diagram

■ Integrated circuit

◆ IC701 (AN7345K) PB/REC EQ. AMP.

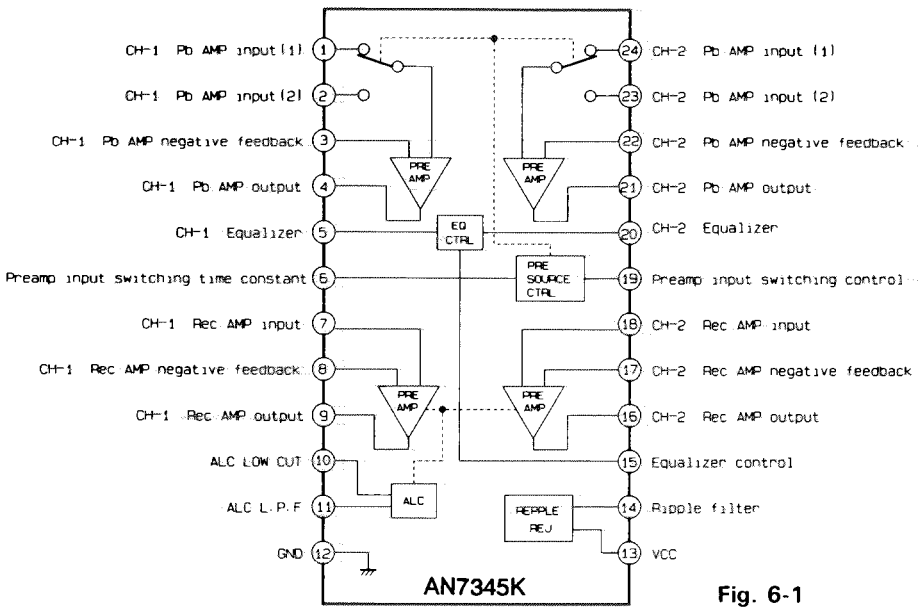
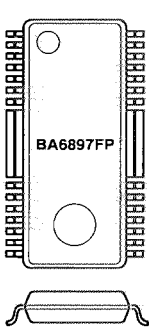


Fig. 6-1

◆ IC602 (BA6897FP) BTL DRIVE



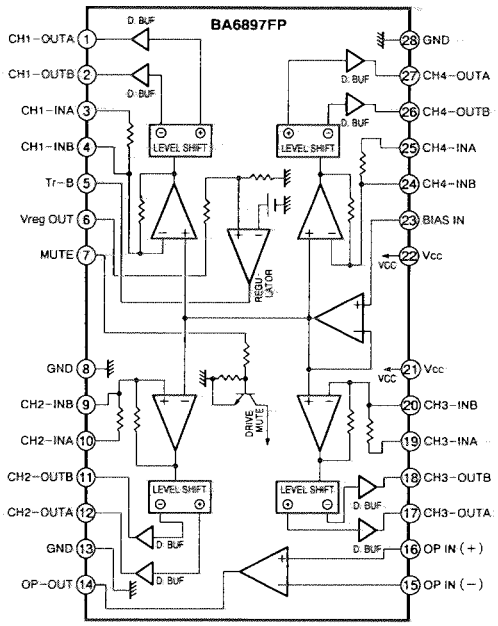
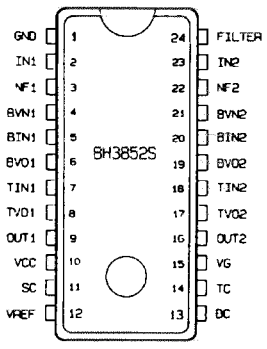


Fig. 6-2

◆ IC501 (BH3852S) VOLUME/TONE



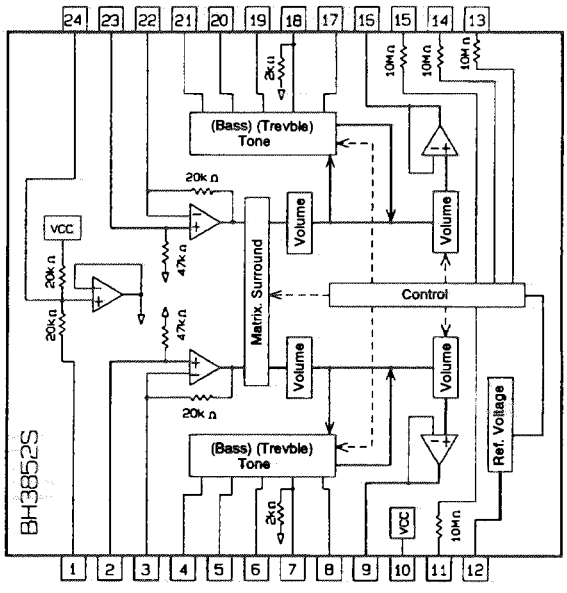


Fig. 6-3

◆ IC702 (BA3126N) R/P SWITCH

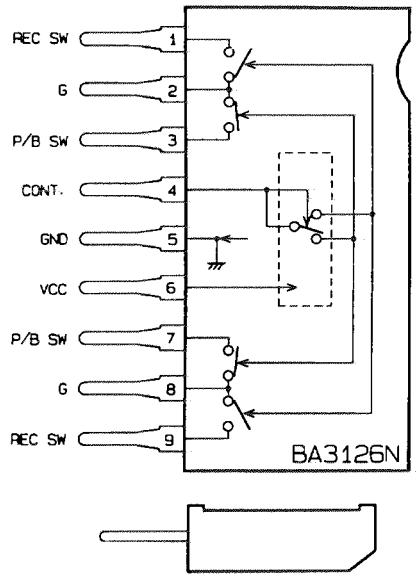
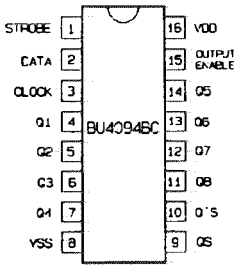


Fig. 6-4

◆ IC902 (BU4094BC) PORT EXPANDER



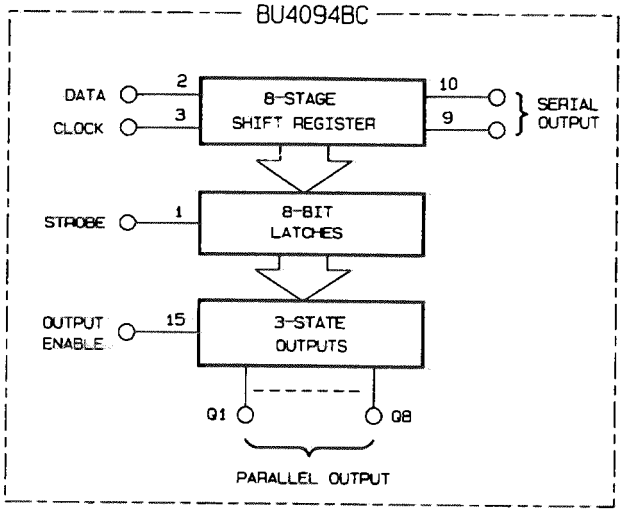


Fig. 6-5

◆ IC601 (AN8806SB) RF AMP.

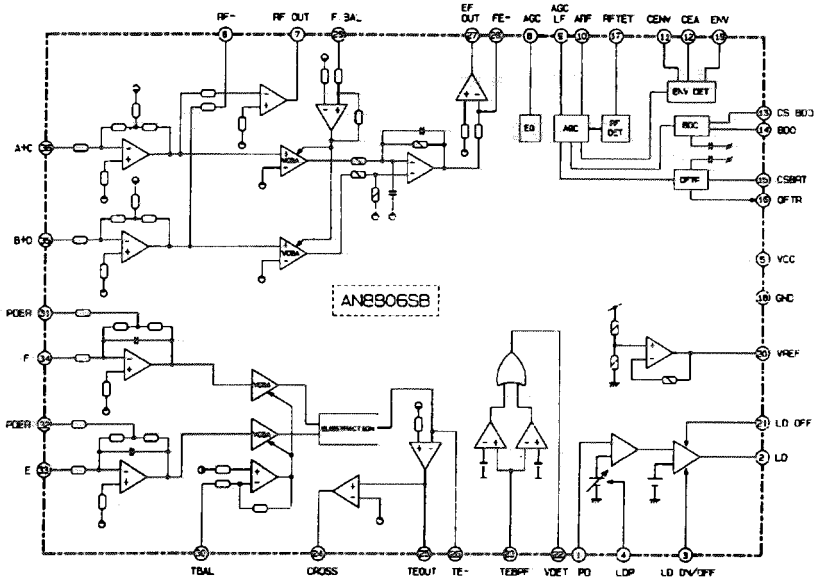


Fig. 6-6

◆ IC603 (MN35510) DIGITAL SERVO

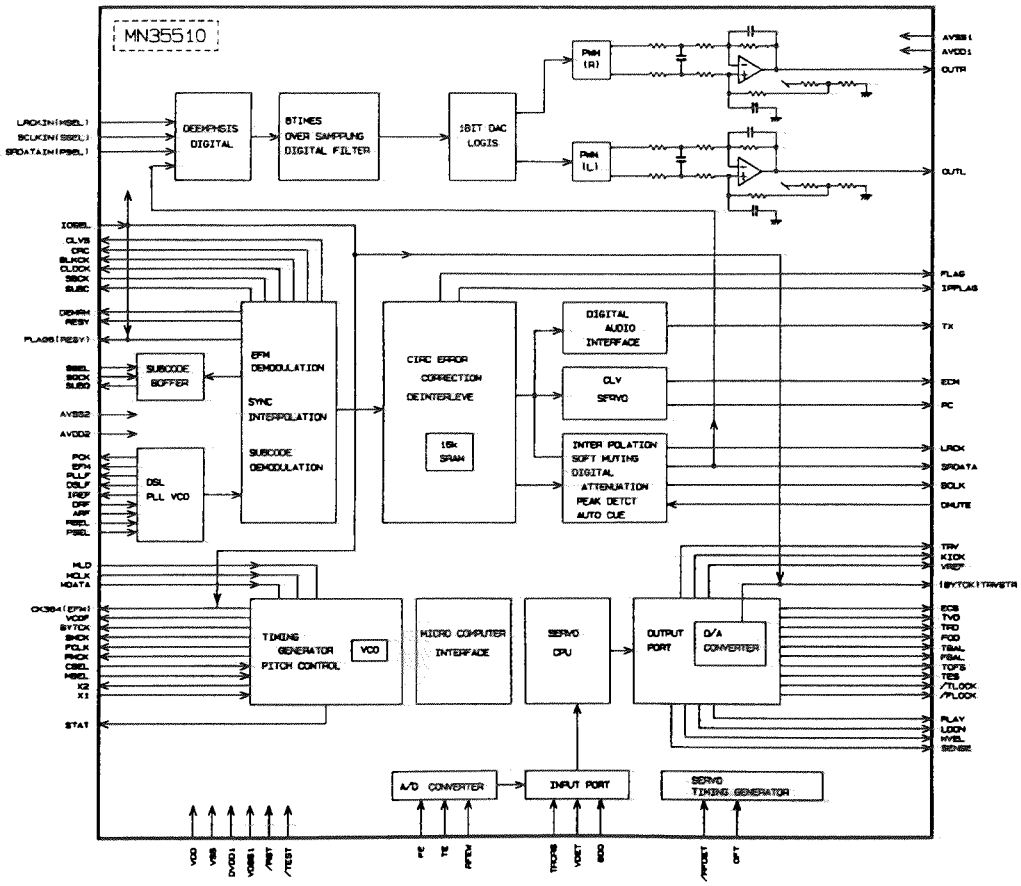


Fig. 6-7

◆ IC801 (NJM4580L) BB AMP.

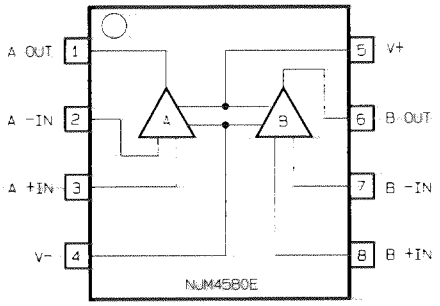
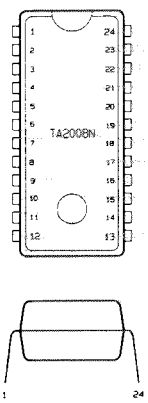


Fig. 6-8

◆ IC2 (TA2008N)



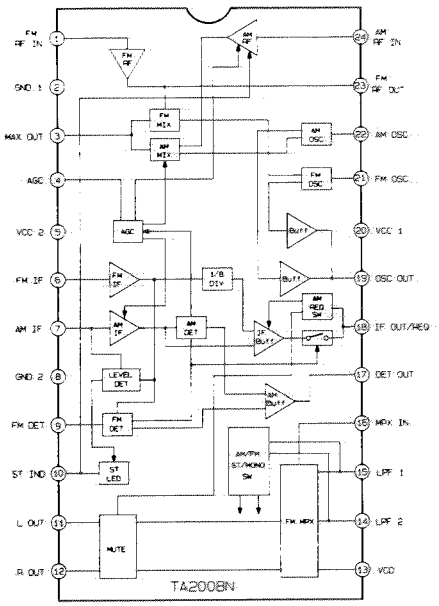


Fig. 6-9

◆ IC3 (LC72136)

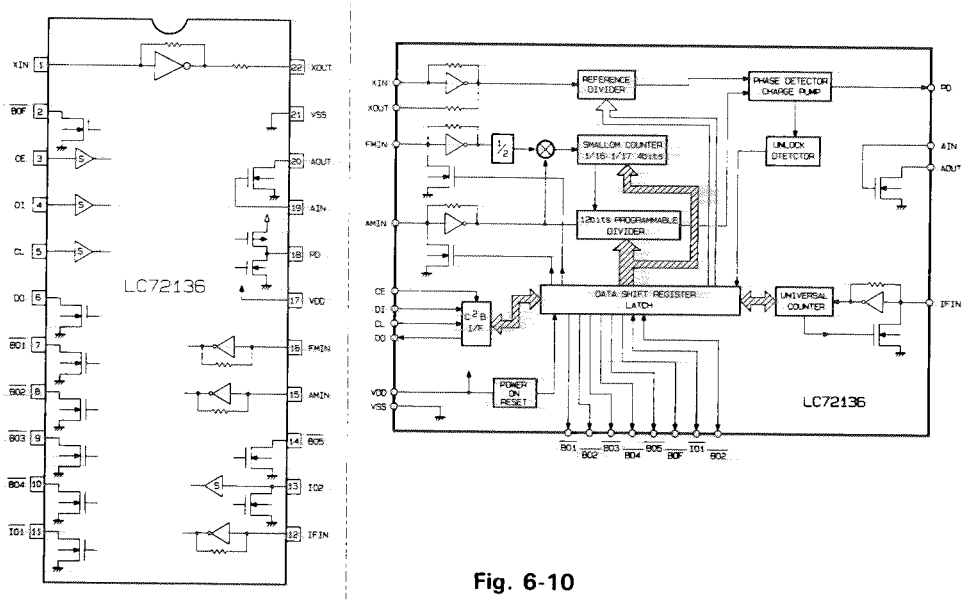


Fig. 6-10

◆ IC601 (LA4705NA) POWER AMP.

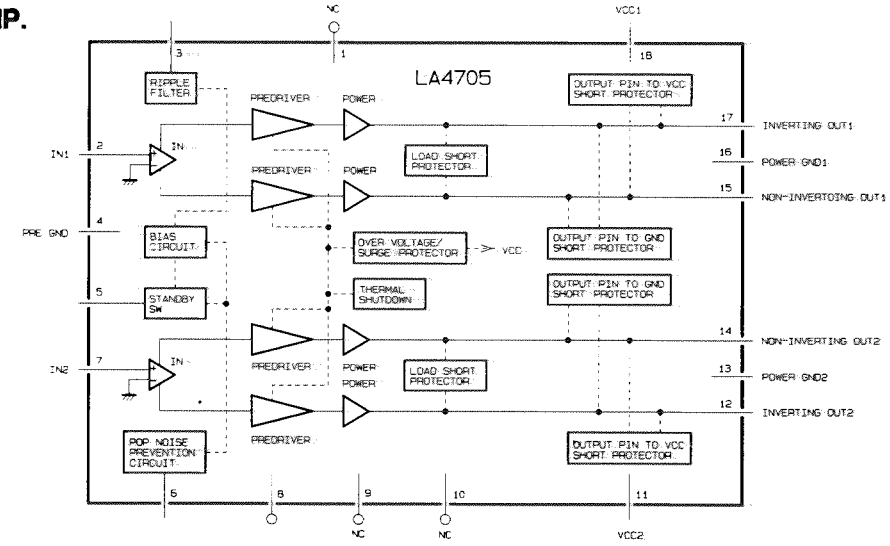


Fig. 6-11

◆ IC951/952 (TA8409S)

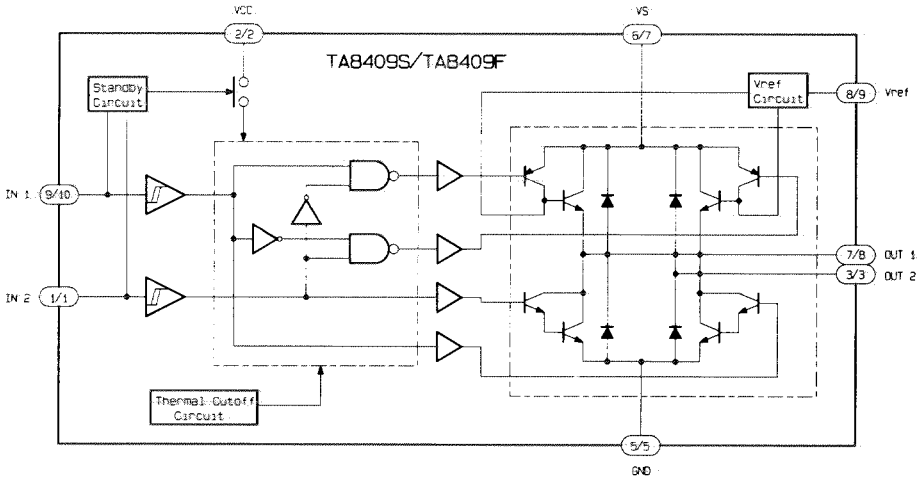


Fig. 6-12

IC901 UPD78064GF system microprocessor

No.	NAME	I/O	Function
1	SDATA	I/O	Serial data (TUNER PLL/EXPANDER)
2	SCK	O	Serial lock (TUNER PLL/EXPANDER)
3	SUBQ	I	CD Q Code data
4	–	O	Not usable
5	SQCK	O	Synchronizing clock of CD Q code data
6	IC	–	Connect it to Vss.
7	X 2	–	Main system clock, 4.19MHz
8	X 1	I	Same as above.
9	Vdd	–	Power supply
10	XT 1	I	Subsystem clock, 32.768kHz
11	XT 2	–	Same as above.
12	RESET	I	Reset
13	DC PS	I	Disc case P. sensor
14	LP PS	I	Loading plate P. sensor
15	8cm PS	I	8cm P. sensor
16	REM	I	Remote controller
17	BEAT	O	Main clock selector
18	BUP	I	Decision of backup power supply (H=Backup)
19	+BCTL	O	Switched 5V control (H=5V breaking)
20	REC SW	I	[REC] switch
21	F. CD	O	Function CD ON/OFF
22	POUT	O	Power ON/OFF
23	SMUTE	O	System muting
24	VOL	O	Volume control (PWM)
25	BASS	O	Bass control (PWM)
26	TRE	O	Treble control (PWM)
27	AVss	–	AD converter GND
28	KEY 0	I	Body key input 0 (including version selection)
29	KEY 1	I	Body key input 1 (including version selection)
30	KEY 2	I	Body key input 2 (including version selection)
31	REST	I	CD rest/changer disc case limit switch
32	LOAD	I	OPEN/CLOSE/UNLOAD limit switch
33	UP/DOWN	I	Drive unit UP/DOWN/CHUCK (CHECK) switch
34	TAPE	I	A PLAY/B PLAY switch
35	SAFETY 1	I	Abnormal voltage detection
36	AVdd	–	Same potential of AD converter power supply and Vdd
37	AVref	–	Reference voltage of AD converter. It si broken under [SLOW] mode.
38	MPX	I	FM stereo detection (L=Stereo)
39	PERIOD	O	TUNER PLL strobe signal
40	Vss	–	GND
41	LED 1	O	Disc LED 1 (H=ON)
42	LED 2	O	Disc LED 2 (H=ON)
43	LED 3	O	Disc LED 3 (H=ON)
44	LED 4	O	Disc LED 4 (H=ON)
45	LED 5	O	Disc LED 5 (H=ON)
46	LED 6	O	Disc LED 6 (H=ON)
47	LED 7	O	Disc LED 7 (H=ON)
48	LED 8	O	Disc LED 8 (H=ON)
49	LED 9	O	Disc LED 9 (H=ON)
50	LED 10	O	Disc LED 10 (H=ON)

No.	NAME	I/O	Function
51	COM 0	O	LCD remote controller 0
52	COM 1	O	LCD remote controller 1
53	COM 2	O	LCD remote controller 2
54	COM 3	O	LCD remote controller 3
55	BIAS	–	LCD bias voltage
56	VLC 0	–	LCD bias voltage BIAS 〉 VLC 0 〉 VLC 1 〉 VLC 2
57	VLC 1	–	LCD bias voltage
58	VLC 2	–	LCD bias voltage
59	Vss	–	GND
60	S 0	O	LCD segment 0
61	S 1	O	LCD segment 1
62	S 2	O	LCD segment 2
63	S 3	O	LCD segment 3
64	S 4	O	LCD segment 4
65	S 5	O	LCD segment 5
66	S 6	O	LCD segment 6
67	S 7	O	LCD segment 7
68	S 8	O	LCD segment 8
69	S 9	O	LCD segment 9
70	S 10	O	LCD segment 10
71	S 11	O	LCD segment 11
72	S 12	O	LCD segment 12
73	S 13	O	LCD segment 13
74	S 14	O	LCD segment 14
75	S 15	O	LCD segment 15
76	S 16	O	LCD segment 16
77	S 17	O	LCD segment 17
78	S 18	O	LCD segment 18
79	S 19	O	LCD segment 19
80	S 20	O	LCD segment 20
81	S 21	O	LCD segment 21
82	S 22	O	LCD segment 22
83	NC	O	NC
84	STAT	O	
85	XRESET	O	
86	MCLK	O	
87	MDATA	O	
88	MLD	O	
89	SCD	I	Detection of CD abnormal voltage
90	LM F	O	1 〉 FOWARD 0 〉 REVERSE
91	LM R	O	0 〉 1 〉
92	UDM UP	O	PU UNIT 1 〉 UP 0 〉 DW CASE 1 〉 DW 0 〉 UP
93	UDM DOWN	O	0 〉 1 〉 0 〉 1 〉
94	LM V	O	Loading motor speed
95	SOL	O	Solenoid ON/OFF (H=ON)
96	PIN	I	[POWER] key
97	R. BIAS	O	REC bias ON/OFF
98	AC/DC	I	Decision of AC/DC power supply
99	SAFETY 2	I	Abnormal voltage detection
100	LATCH	O	Expander latch

■ CD player diagram

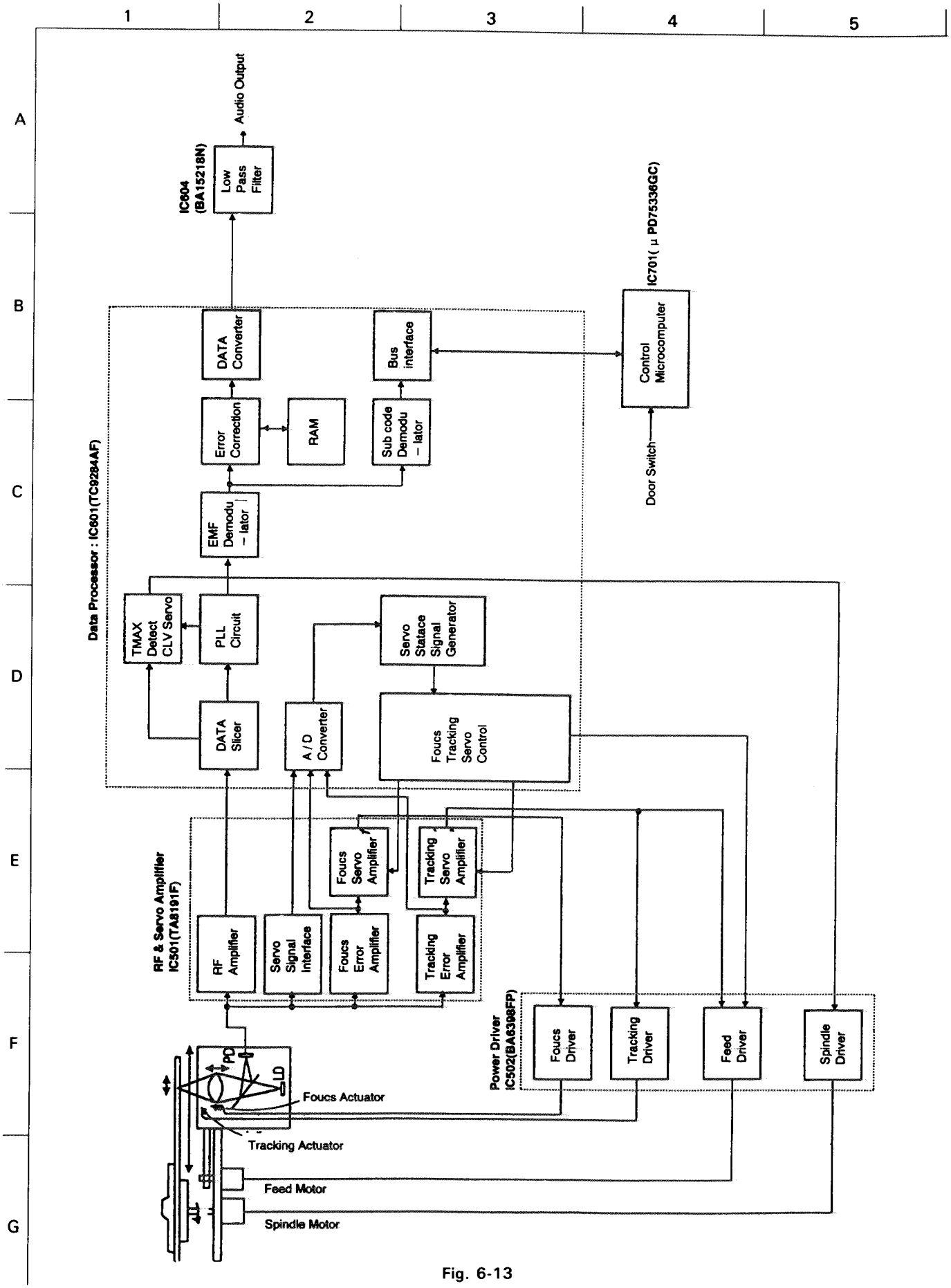


Fig. 6-13

Signal circuit diagram

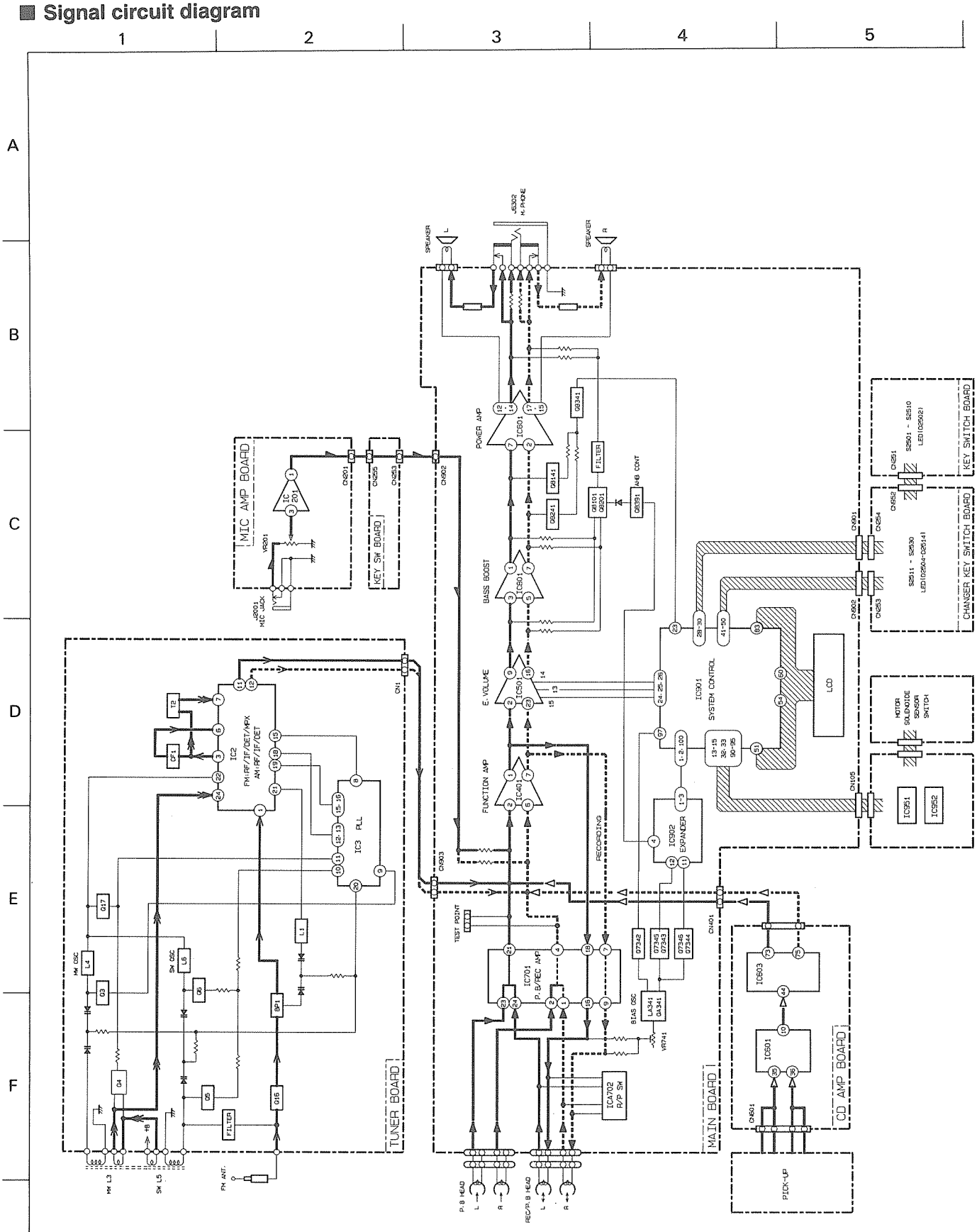


Fig.6-14

PC-XC70 system diagram

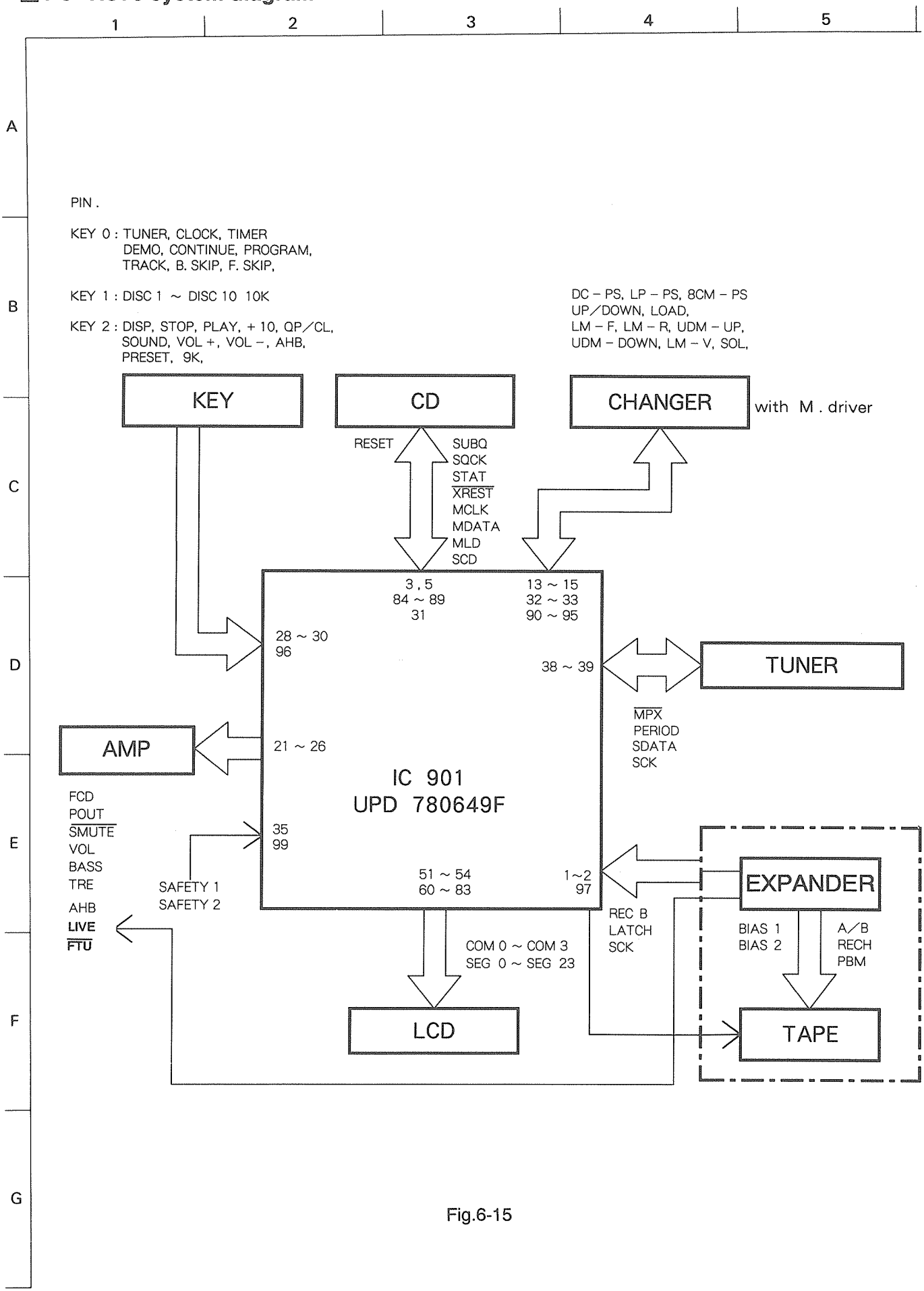
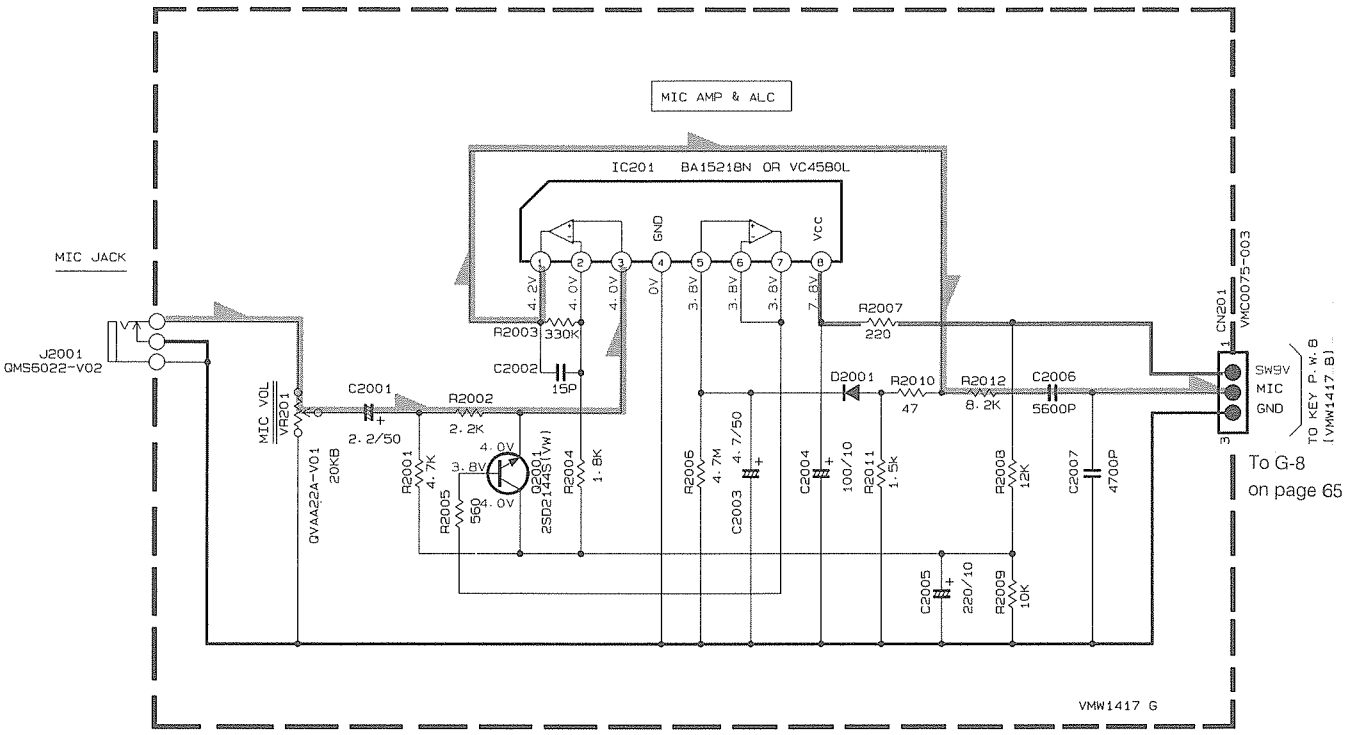


Fig.6-15

7 Standard Circuit Diagram

■ MIC amplifier circuit



NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   CONDITION ---- TAPE STOP MODE

2. UNLESS OTHERWISE SPECIFIED, RESISTORS ARE 1/6W ± 5% CARBON RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL INDUCTANCE VALUES ARE IN μH(m=mH).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
   ALL DIODES ARE 1SS254T OR HSS104T.

Fig.7-1

MIC Signal line

+B Line

Note : VDH7073007AX

■ Changer driver circuit

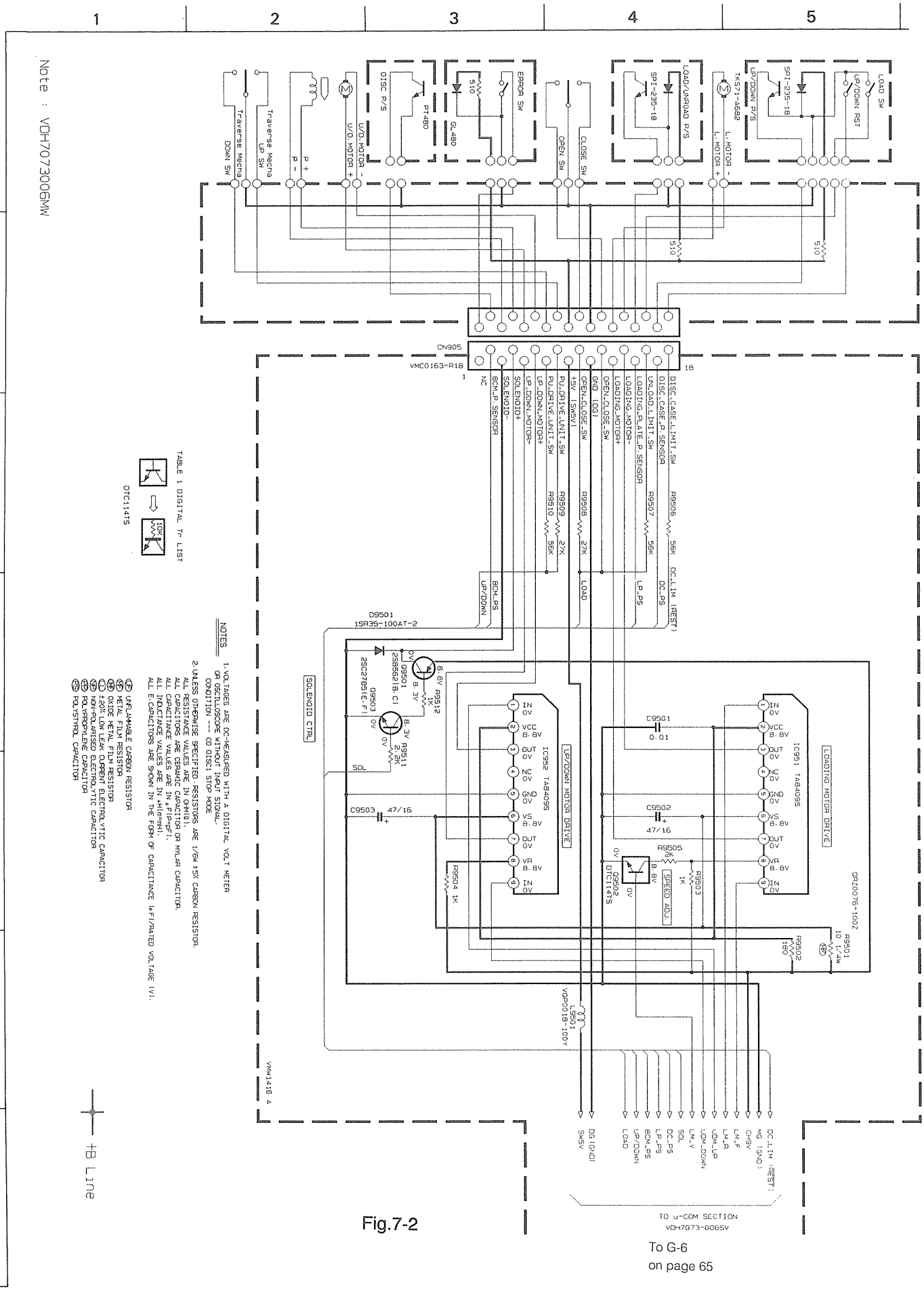


Fig.7-2

To G-6
on page 65

■ Indicator/system microprocessor circuit

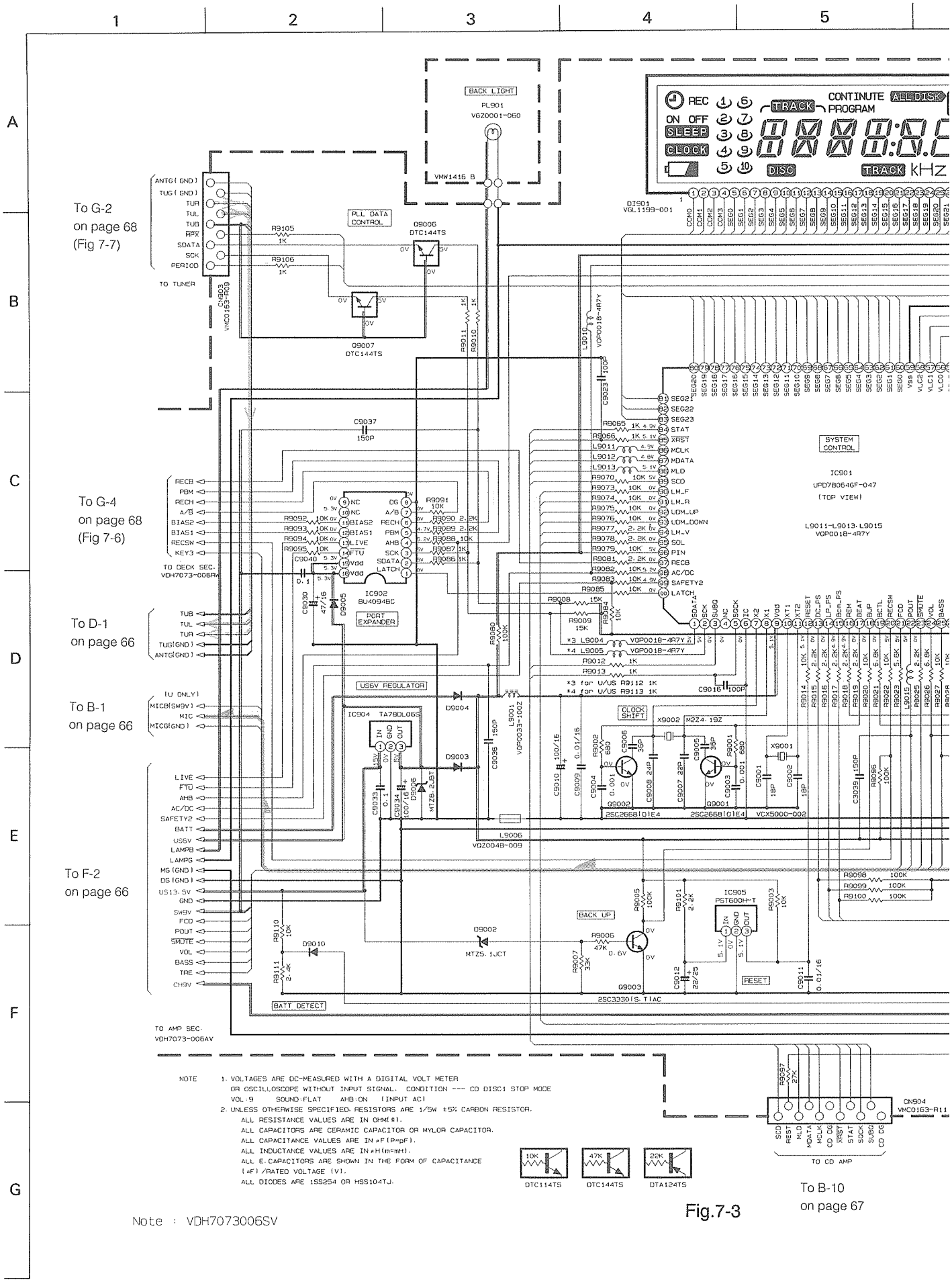
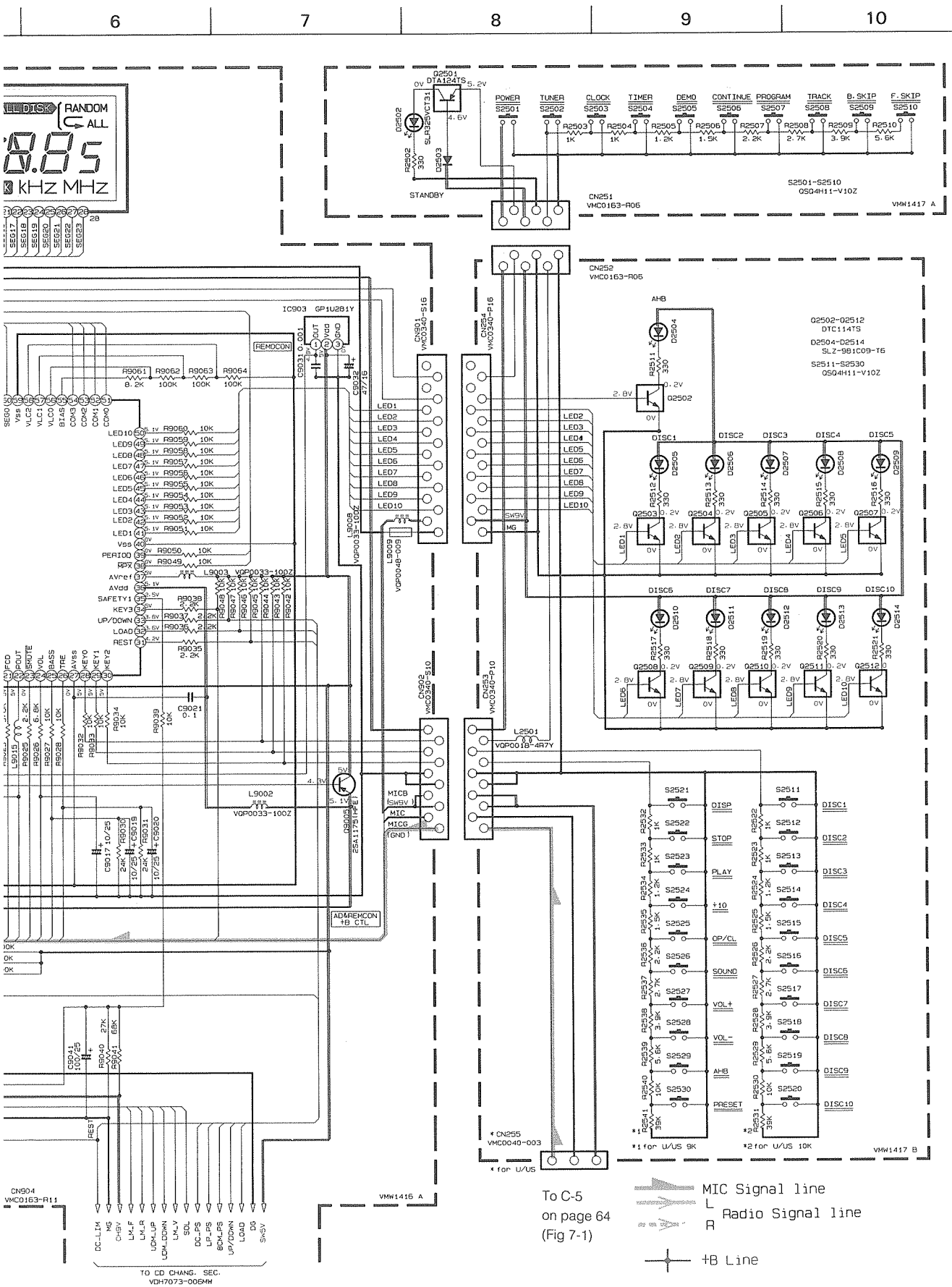


Fig.7-3

Note : VDH7073006SV



To C-5
on page 64
(Fig 7-1)

To G-4
on page 64 (Fig 7-2)

Power amplifier circuit

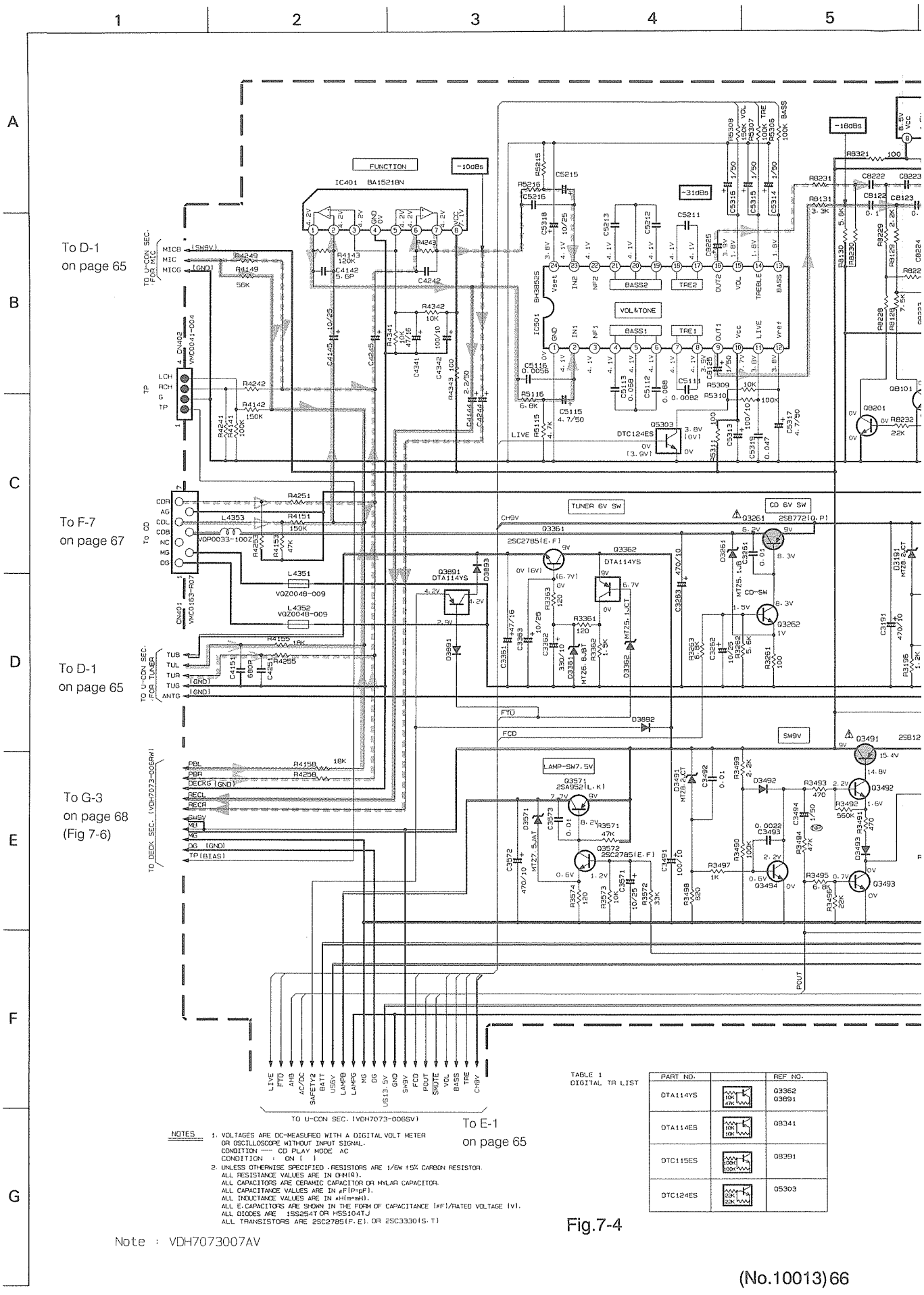


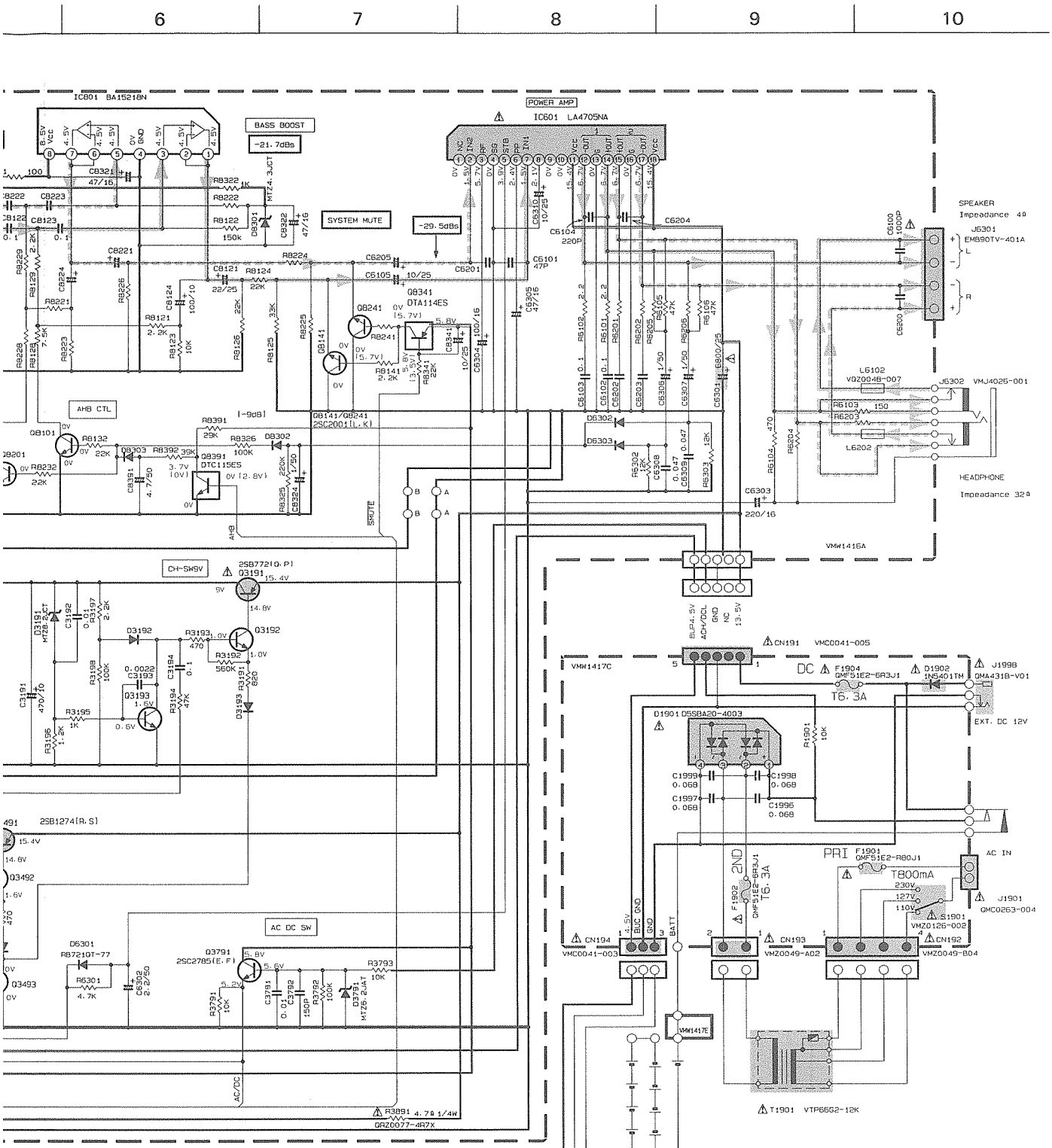
TABLE 1
DIGITAL TR LIST

PART NO.		REF NO.
DTA114YS	10K 47K	Q3362 Q3891
DTA114ES	10K 10K	Q8341
DTC115ES	100K 100K	Q8391
DTC124ES	22K 22K	Q5303

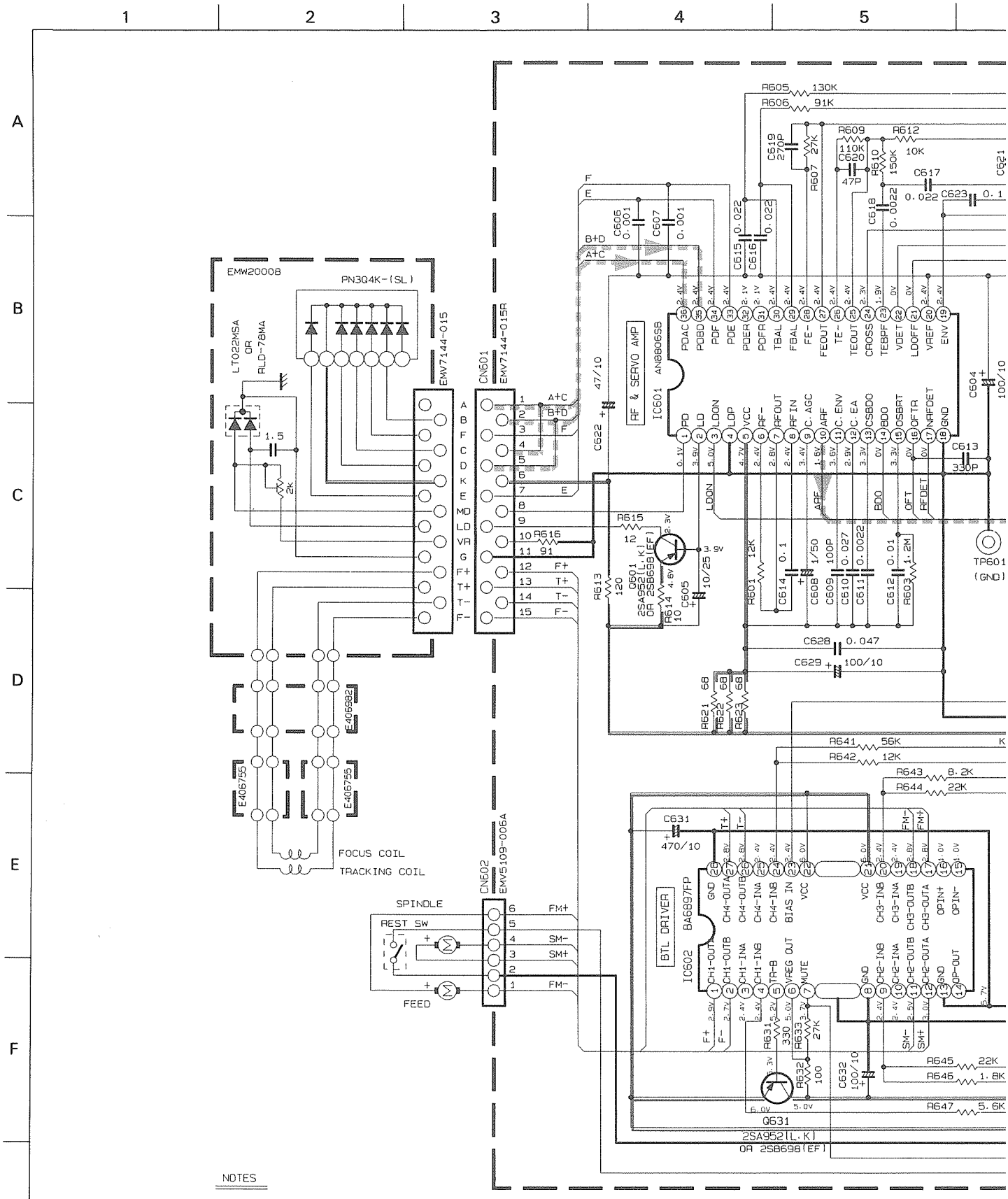
NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
CONDITION ---- CD PLAY MODE AC
CONDITION : ON [ ]
2. UNLESS OTHERWISE SPECIFIED . RESISTORS ARE 1/6W ±5% CARBON RESISTOR.
ALL RESISTANCE VALUES ARE IN OHM(Ω).
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
ALL CAPACITANCE VALUES ARE IN μF(P=pF).
ALL INDUCTANCE VALUES ARE IN μH(m=mH).
ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
ALL DIODES ARE 1SS254T OR HSS104TJ
ALL TRANSISTORS ARE 2SC2785(F.E). OR 2SC3330(S.T)

Fig.7-4

Note : VDH7073007AV

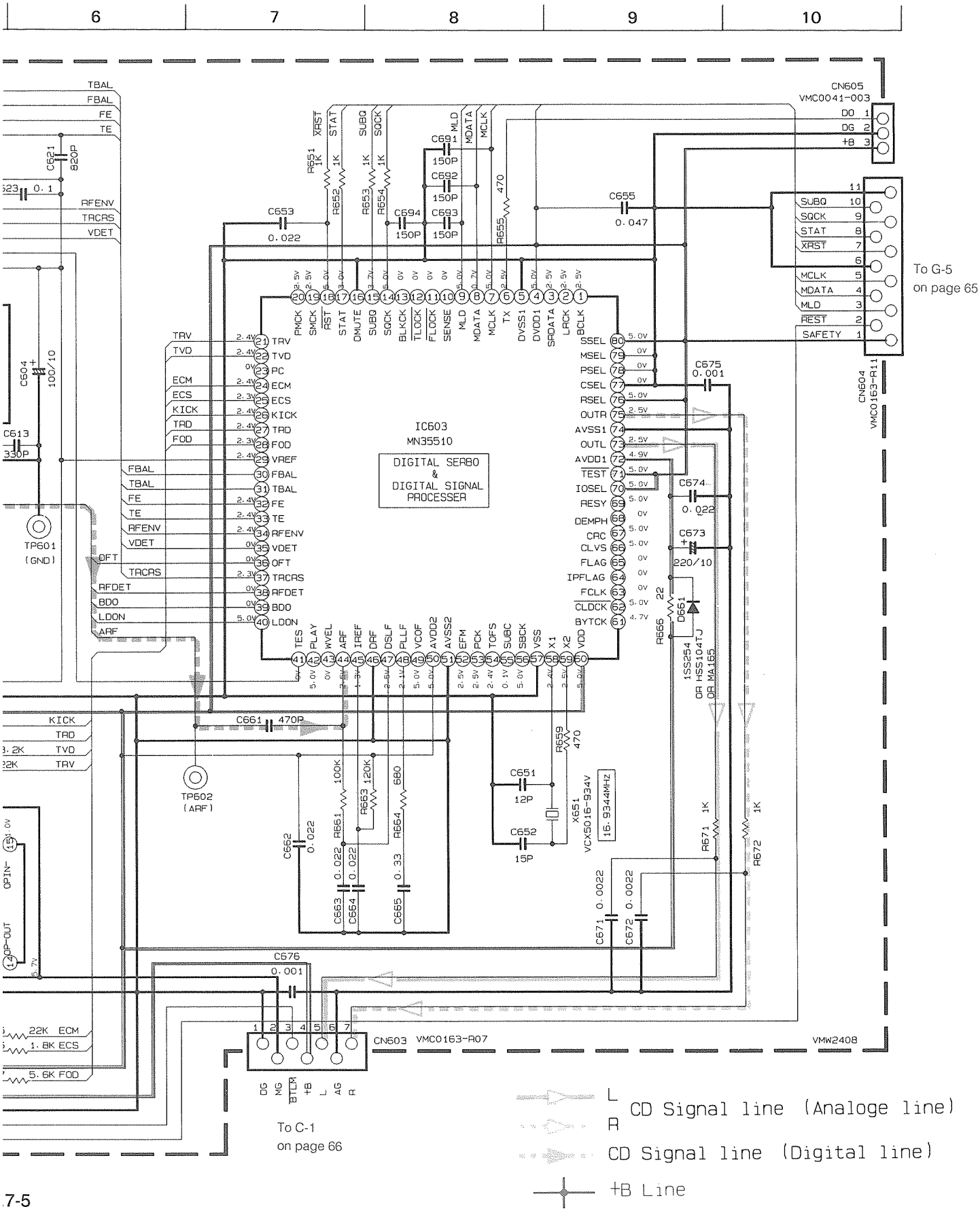

6
7
8
9
10
IC801 BA15218N
POWER AMP
IC601 LA4705NA
BASS BOOST
-21.7dBs
SYSTEM MUTE
-29.5dBs
SPEAKER
Impedance 4Ω
J6301
EMB90TV-401A
HEADPHONE
Impedance 32Ω
J6302
VMJ4026-001
AHB CTL
CH-SW9V
AC DC SW
SMUTE
VMW1416A
VMW1417C
CN191
VMC0041-005
DC
T6.3A
EXT. DC 12V
J1998
J1902
J1901
AC IN
PRI
T800mA
S1901
CN194
CN193
CN192
VMW1417E
T1901
VTP66G2-12K
VMW1417D
L1901
VQZ004B-009
TO TUNER GND
VMW1417F
CD Signal line
Tape P/B Signal line
Radio Signal line
Psrts are safety assurance parts.
When replacing those parts make
sure to use the specified one.
+B Line
Recording signal line
MIC Signal line

CD amplifier circuit



Note
VDH103100CW
(MATSITA-IC)

Fig.7-5


6
7
8
9
10
IC603
MN35510
DIGITAL SERBO
&
DIGITAL SIGNAL
PROCESSER
CN605
VMC0041-003
CN604
VMC0163-R11
CN603
VMC0163-R07
VMW2408
X651
VCX5016-934V
16.9344MHz
TP601
(GND)
TP602
(ARF)
To G-5
on page 65
To C-1
on page 66
CD Signal line (Analoge line)
CD Signal line (Digital line)
+B Line

Cassette amplifier circuit

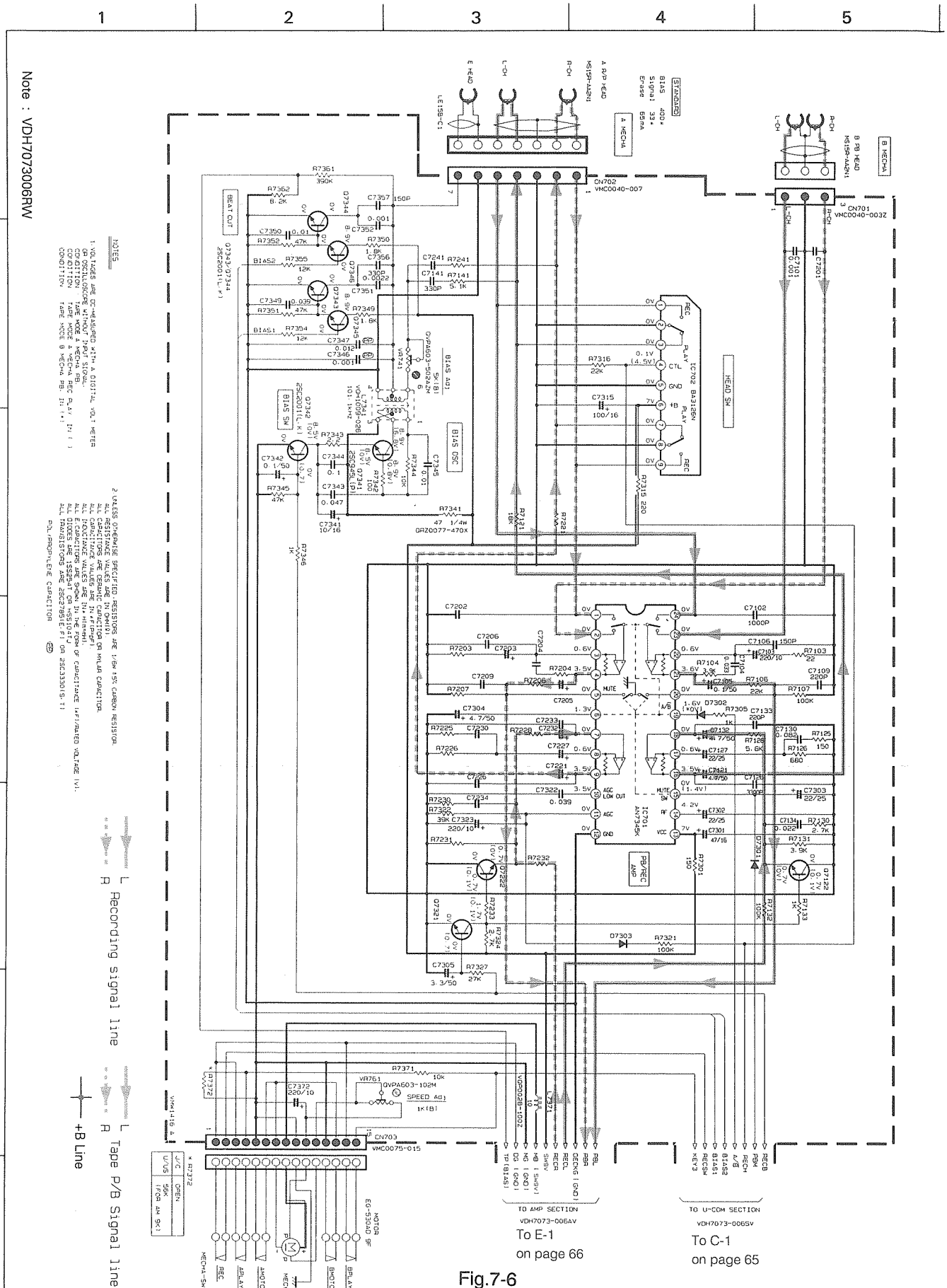


Fig.7-6

Tuner board

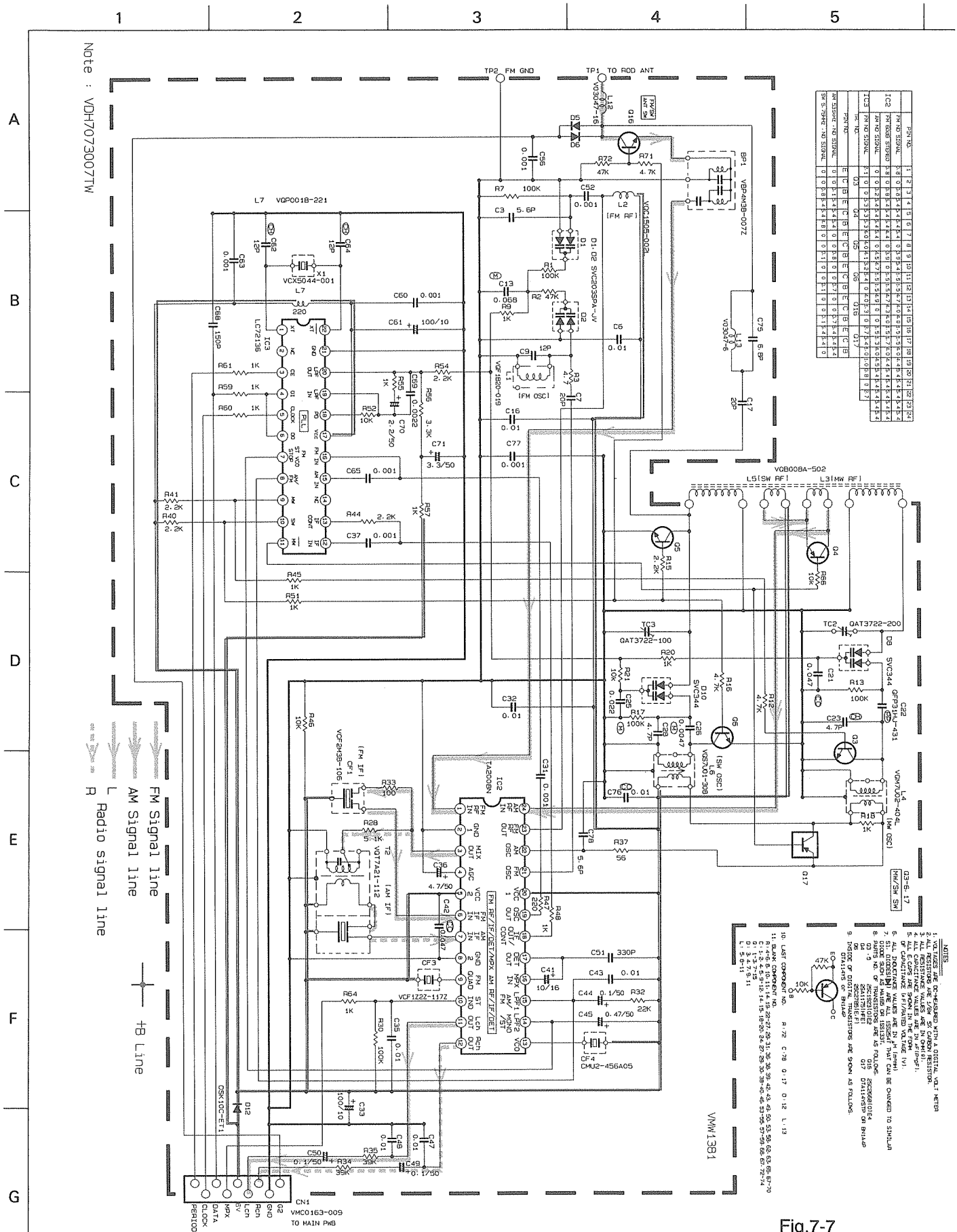


Fig.7-7

8 Location of P.C.Board Parts and Parts List

Tuner board

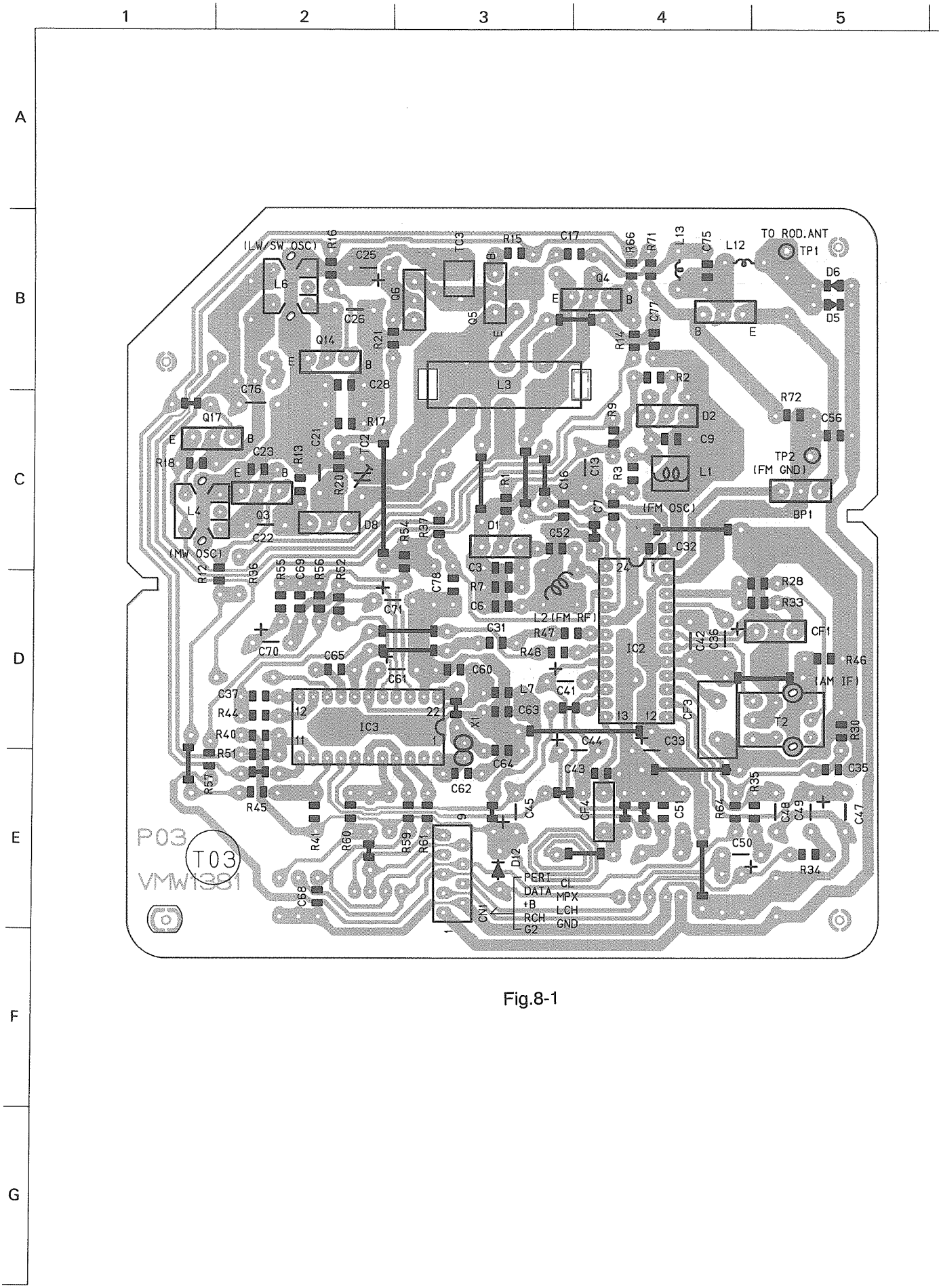


Fig.8-1

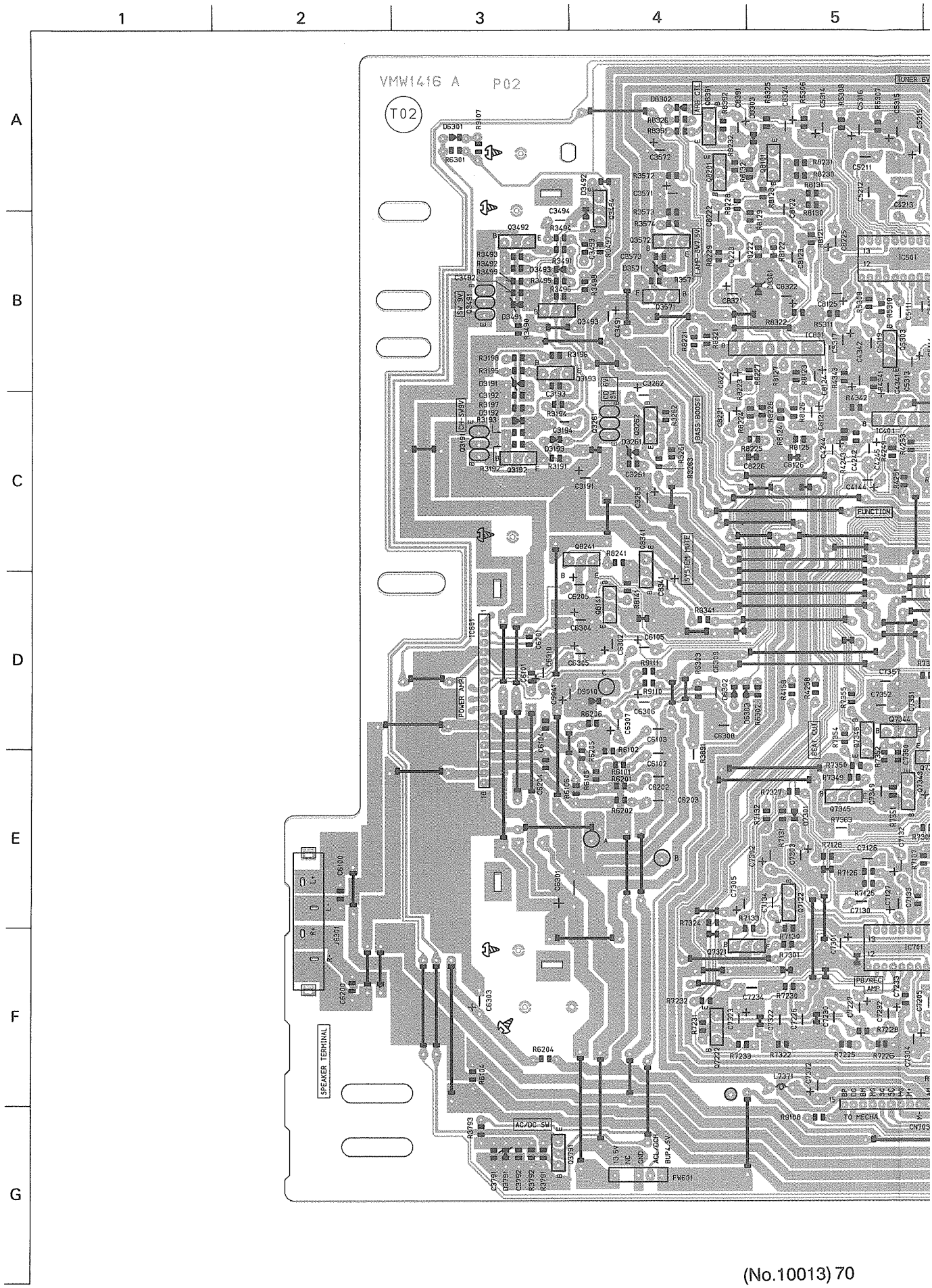
BLOCK NO. 01

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	BP 1	VBP4M3B-007Z	P FILTER	BPF	
	C 3	QCSB1HK-5R6Y	C.CAPACITOR	5.6PF 10% 50V	
	C 6	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 7	QCS11HJ-200	C.CAPACITOR	20PF 5% 50V	
	C 9	QCS11HJ-120	C.CAPACITOR	12PF 5% 50V	
	C 13	QFV71HJ-683ZM	FILM CAPACITOR	.068MF 5% 50V	
	C 16	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 17	QCS11HJ-200	C.CAPACITOR	SW	
	C 21	QCC11EM-473V	C.CAPACITOR	.047MF 20% 25V	
	C 22	QFP41HJ-431	PP.CAPACITOR	430PF 5% 50V	
	C 23	QCT30CH-4R7Y	C.CAPACITOR	4.7PF 5% 50V	
	C 25	QFLC1HJ-223ZM	M.CAPACITOR	.022MF 5% 50V	
	C 26	QFN41HJ-472	M.CAPACITOR	4700PF 5% 50V	
	C 28	QCSB1HK-4R7Y	C.CAPACITOR	4.7PF 10% 50V	
	C 31	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 32	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 33	QET41AM-107	E.CAPACITOR	100MF 20% 10V	
	C 35	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 36	QET41HM-475	E.CAPACITOR	=R19	
	C 37	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 41	QET41CM-106	E.CAPACITOR	10MF 20% 16V	
	C 42	QCC11EM-473V	C.CAPACITOR	.047MF 20% 25V	
	C 43	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 44	QETA1HM-104N	E.CAPACITOR	.10MF 20% 50V	
	C 45	QET41HM-474	E.CAPACITOR	.47MF 20% 50V	
	C 47	QCC11EM-103V	C.CAPACITOR	.010MF 20% 25V	
	C 48	QCC11EM-103V	C.CAPACITOR	.010MF 20% 25V	
	C 49	QETA1HM-104N	E.CAPACITOR	.10MF 20% 50V	
	C 50	QETA1HM-104N	E.CAPACITOR	.10MF 20% 50V	
	C 51	QCBB1HK-331Y	C.CAPACITOR	330PF 10% 50V	
	C 52	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 56	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 60	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 61	QET41AM-107	E.CAPACITOR	100MF 20% 10V	
	C 62	QCT30CH-120Y	C.CAPACITOR	12PF 5% 50V	
	C 63	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 64	QCT30CH-120Y	C.CAPACITOR	12PF 5% 50V	
	C 65	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 68	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	C 69	QCXB1CM-222Y	C.CAPACITOR	2200PF 20% 16V	
	C 70	QETC1HM-225ZN	E.CAPACITOR	2.2MF 20% 50V	
	C 71	QETC1HM-335Z	E.CAPACITOR	3.3MF 20% 50V	
	C 75	QCSB1HK-6R8Y	C.CAPACITOR	SW	
	C 76	QCC11EM-103V	C.CAPACITOR	SW	
	C 77	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 78	QCSB1HK-5R6Y	C.CAPACITOR	SW	
	CF 1	VCF2M3B-106	C FILTER		
	CF 3	VCF1Z2Z-117Z	C FILTER		
	CF 4	CMU2-456A05	CERA LOCK		
	CN 1	VMC0163-009	CONNECTOR	TO MAIN	
	D 1	SVC203SPA-AB-AL	VARI CAP		
	D 2	SVC203SPA-AB-AL	VARI CAP		
	D 5	1SS133	SI DIODE		
	D 6	1SS133	SI DIODE		
	D 8	SVC344-AA	VARI CAP		
	D 10	SVC344-AA	VARI CAP		
	D 12	DSK10C-E	DIODE		
	IC 2	TA2008N	IC		
	IC 3	LC72136	IC		
	L 1	VQF1B20-019	OSC COIL	FM OSC	

BLOCK NO. 01

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	L 2	VQC1505-002T	RF COIL	FM RF	
	L 3	VQB008A-502	BAR ANTENA	MW/SW RF	
	L 4	VQM7U02-404	OSC COIL(MW)	MW OSC	
	L 6	VQS7U01-308	OSC COIL	SW OSC	
	L 7	VQP0018-221	INDUCTOR		
	L 12	V03047-16	RF COIL		
	L 13	V03047-6	ANTENNA COIL	SW	
	Q 3	2SC1923	TRANSISTOR		
	Q 4	2SA1175	TRANSISTOR		
	Q 5	2SC1923	TRANSISTOR		
	Q 6	2SC2785	TRANSISTOR		
	Q 16	2SC2668(O)	TRANSISTOR	FM/SW SW	
	Q 17	DTA114YS	TRANSISTOR		
	R 1	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R 2	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R 3	QRD167J-4R7	CARBON RESISTOR	4.7 5% 1/6W	
	R 7	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R 9	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 12	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R 13	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R 15	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 16	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R 17	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R 18	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 20	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 21	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 28	QRD161J-512	CARBON RESISTOR	5.1K 5% 1/6W	
	R 30	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R 32	QRD161J-223	CARBON RESISTOR	=B121	
	R 33	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
	R 34	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
	R 35	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
	R 37	QRD161J-560	CARBON RESISTOR	56 5% 1/6W	
	R 40	QRD161J-222	CARBON RESISTOR	E/U	
	R 41	QRD161J-222	CARBON RESISTOR	E/U	
	R 44	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 45	QRD161J-102	CARBON RESISTOR	E/U	
	R 46	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 47	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
	R 48	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 51	QRD161J-102	CARBON RESISTOR	E/U	
	R 52	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 54	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 55	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 56	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
	R 57	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 59	QRD161J-102	CARBON RESISTOR	=B113	
	R 60	QRD161J-102	CARBON RESISTOR	=B114	
	R 61	QRD161J-102	CARBON RESISTOR	=B108	
	R 64	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 66	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 71	QRD161J-472	CARBON RESISTOR	SW	
	R 72	QRD161J-473	CARBON RESISTOR	SW	
	T 2	VQT7A21-112	IFT		
	TC 2	QAT3722-200ZM	T.CAPACITOR	MW RF	
	TC 3	QAT3722-100M	T.CAPACITOR	SW RF	
	TP 1	VMZ0015-002	POST PIN	TO ROD ANT	
	TP 2	VMZ0015-002	POST PIN	GND	
	X 1	VCX5044-001	CRYSTAL		

■ Main board


1
2
3
4
5
A
B
C
D
E
F
G
VMW1416 A P02
T02
TUNER 6V
FUNCTION
SYSTEM MUTE
POWER AMP
BEAT CUT
PB/REC AMP
SPEAKER TERMINAL
AC/DC SW
TO MECHA
IC501
IC801
IC401
IC701
CN703
FWB01

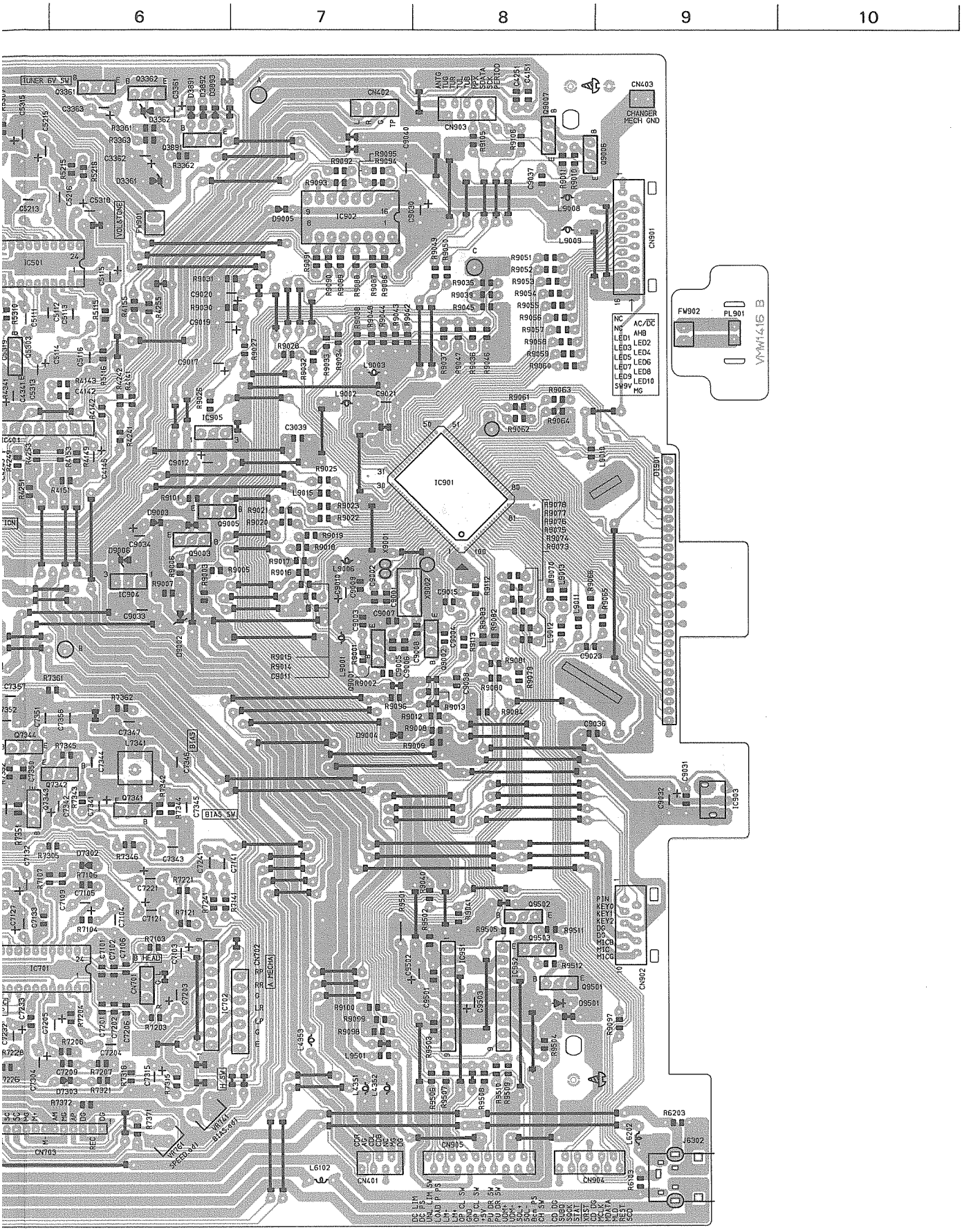

6
7
8
9
10
IC901
IC902
IC905
IC501
IC701
CN402
CN403
CHANGER MECH GND
CN901
CN902
CN903
CN904
CN905
CN401
CN703
FW902
PL901
VWM416 B
TUNER 6V SW
VOLSTONE
B HEAD
M MECHA
BIAS SW
L6102
R6203
J6302

Fig.8-2

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	CN401	VMC0163-R07	CONNECTOR	MAIN-CD(AMP)	
	CN402	VMC0041-004	CONNECTOR	TP	
	CN403	VMC0041-002	CONNECTOR	CHANGER MG	
	CN701	VMC0040-003	CONNECTOR	TO P HEAD	
	CN702	VMC0040-007	CONNECTOR	TO R/P HEAD	
	CN703	VMC0075-015N	CONNECTOR	TO MECHA SW	
	CN901	VMC0340-S16	CONNECTOR	SW-MAIN	
	CN902	VMC0340-S10	CONNECTOR	SW-MAIN	
	CN903	VMC0163-R09	CONNECTOR	MAIN-TUNER	
	CN904	VMC0163-R11	CONNECTOR	MAIN-CD(CTL)	
	CN905	VMC0163-R18	CONNECTOR	MAIN-CHANG	
	C3039	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	C3191	QET41AM-477	E.CAPACITOR	470MF 20% 10V	
	C3192	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
	C3193	QCXB1CM-222Y	C.CAPACITOR	2200PF 20% 16V	
	C3194	QCC11EM-104V	C.CAPACITOR	.10MF 20% 25V	
	C3261	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
	C3262	QET41EM-106	E.CAPACITOR	10MF 20% 25V	
	C3263	QET41AM-477	E.CAPACITOR	470MF 20% 10V	
	C3361	QET41CM-476	E.CAPACITOR	47MF 20% 16V	
	C3362	QETC1AM-337ZN	E.CAPACITOR	330MF 20% 10V	
	C3363	QET41EM-106	E.CAPACITOR	10MF 20% 25V	
	C3491	QET41AM-107	E.CAPACITOR	100MF 20% 10V	
	C3492	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
	C3493	QCXB1CM-222Y	C.CAPACITOR	2200PF 20% 16V	
	C3494	QEN61HM-105Z	NP.E.CAPACITOR	1.0MF 20% 50V	
	C3571	QET41EM-106	E.CAPACITOR	10MF 20% 25V	
	C3572	QET41AM-477	E.CAPACITOR	470MF 20% 10V	
	C3573	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
	C3791	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
	C3792	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	C4142	QCSB1HK-5R6Y	C.CAPACITOR	5.6PF 10% 50V	
	C4144	QETC1HM-225ZN	E.CAPACITOR	2.2MF 20% 50V	
	C4145	QTE1C03-106Z	E.CAPACITOR		
	C4151	QCBB1HK-681Y	C.CAPACITOR	680PF 10% 50V	
	C4242	QCSB1HK-5R6Y	C.CAPACITOR	5.6PF 10% 50V	
	C4244	QETC1HM-225ZN	E.CAPACITOR	2.2MF 20% 50V	
	C4245	QTE1C03-106Z	E.CAPACITOR		
	C4251	QCBB1HK-681Y	C.CAPACITOR	680PF 10% 50V	
	C4341	QET41CM-476	E.CAPACITOR	47MF 20% 16V	
	C4342	QET41AM-107	E.CAPACITOR	100MF 20% 10V	
	C5111	QFLC1HJ-822ZM	M.CAPACITOR	8200PF 5% 50V	
	C5112	QFLC1HJ-683ZM	M.CAPACITOR	.068MF 5% 50V	
	C5113	QFLC1HJ-683ZM	M.CAPACITOR	.068MF 5% 50V	
	C5115	QET41HM-475	E.CAPACITOR	4.7MF 20% 50V	
	C5116	QFLC1HJ-562ZM	M.CAPACITOR	5600PF 5% 50V	
	C5211	QFLC1HJ-822ZM	M.CAPACITOR	8200PF 5% 50V	
	C5212	QFLC1HJ-683ZM	M.CAPACITOR	.068MF 5% 50V	
	C5213	QFLC1HJ-683ZM	M.CAPACITOR	.068MF 5% 50V	
	C5215	QET41HM-475	E.CAPACITOR	4.7MF 20% 50V	
	C5216	QFLC1HJ-562ZM	M.CAPACITOR	5600PF 5% 50V	
	C5313	QET41AM-107	E.CAPACITOR	100MF 20% 10V	
	C5314	QET41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C5315	QET41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C5316	QET41HM-105	E.CAPACITOR	1.0MF 20% 50V	

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C5317	QET41HM-475	E.CAPACITOR	4.7MF 20% 50V	
	C5318	QET41EM-106	E.CAPACITOR	10MF 20% 25V	
	C5319	QFLC1HJ-473ZM	M.CAPACITOR	.047MF 5% 50V	
	C6100	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C6101	QCS11HJ-470	C.CAPACITOR	47PF 5% 50V	
	C6102	QFLC1HJ-104ZM	M.CAPACITOR	.10MF 5% 50V	
	C6103	QFLC1HJ-104ZM	M.CAPACITOR	.10MF 5% 50V	
	C6104	QCBB1HK-221Y	C.CAPACITOR	220PF 10% 50V	
	C6105	QTE1C03-106Z	E.CAPACITOR		
	C6200	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C6201	QCS11HJ-470	C.CAPACITOR	47PF 5% 50V	
	C6202	QFLC1HJ-104ZM	M.CAPACITOR	.10MF 5% 50V	
	C6203	QFLC1HJ-104ZM	M.CAPACITOR	.10MF 5% 50V	
	C6204	QCBB1HK-221Y	C.CAPACITOR	220PF 10% 50V	
	C6205	QTE1C03-106Z	E.CAPACITOR		
⚠	C6301	QETM1EM-688	E.CAPACITOR	6800MF 20% 25V	
	C6302	QETC1HM-225ZM	E.CAPACITOR	2.2MF 20% 50V	
	C6303	QET41CM-227	E.CAPACITOR	220MF 20% 16V	
	C6304	QET41CM-107	E.CAPACITOR	100MF 20% 16V	
	C6305	QET41CM-476	E.CAPACITOR	47MF 20% 16V	
	C6306	QET41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C6307	QET41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C6308	QFV81HJ-473	FILM CAPACITOR	.047MF 5% 50V	
	C6309	QFV81HJ-473	FILM CAPACITOR	.047MF 5% 50V	
	C6310	QET41EM-106	E.CAPACITOR	10MF 20% 25V	
	C7101	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C7102	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C7103	QET41AM-227	E.CAPACITOR	220MF 20% 10V	
	C7104	QFLC1HJ-333ZM	M.CAPACITOR	.033MF 5% 50V	
	C7105	QETC1HM-104ZN	E.CAPACITOR	.10MF 20% 50V	
	C7106	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	C7109	QCBB1HK-221Y	C.CAPACITOR	220PF 10% 50V	
	C7121	QET41HM-475	E.CAPACITOR	4.7MF 20% 50V	
	C7126	QCY41HK-332	C.CAPACITOR	3300PF 10% 50V	
	C7127	QETC1EM-226ZN	E.CAPACITOR	22MF 20% 25V	
	C7130	QFLC1HJ-823ZM	M.CAPACITOR	.082MF 5% 50V	
	C7132	QET41HM-475	E.CAPACITOR	4.7MF 20% 50V	
	C7133	QCBB1HK-221Y	C.CAPACITOR	220PF 10% 50V	
	C7134	QFLC1HJ-223ZM	M.CAPACITOR	.022MF 5% 50V	
	C7141	QCS11HJ-331	C.CAPACITOR	330PF 5% 50V	
	C7201	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C7202	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C7203	QET41AM-227	E.CAPACITOR	220MF 20% 10V	
	C7204	QFLC1HJ-333ZM	M.CAPACITOR	.033MF 5% 50V	
	C7205	QETC1HM-104ZN	E.CAPACITOR	.10MF 20% 50V	
	C7206	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	C7209	QCBB1HK-221Y	C.CAPACITOR	220PF 10% 50V	
	C7221	QET41HM-475	E.CAPACITOR	4.7MF 20% 50V	
	C7226	QCY41HK-332	C.CAPACITOR	3300PF 10% 50V	
	C7227	QETC1EM-226ZN	E.CAPACITOR	22MF 20% 25V	
	C7230	QFLC1HJ-823ZM	M.CAPACITOR	.082MF 5% 50V	
	C7232	QET41HM-475	E.CAPACITOR	4.7MF 20% 50V	
	C7233	QCBB1HK-221Y	C.CAPACITOR	220PF 10% 50V	
	C7234	QFLC1HJ-223ZM	M.CAPACITOR	.022MF 5% 50V	
	C7241	QCS11HJ-331	C.CAPACITOR	330PF 5% 50V	

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C7301	QET41CM-476	E.CAPACITOR	47MF 20% 16V	
	C7302	QETC1EM-226ZN	E.CAPACITOR	22MF 20% 25V	
	C7303	QETC1EM-226ZN	E.CAPACITOR	22MF 20% 25V	
	C7304	QET41HM-475	E.CAPACITOR	4.7MF 20% 50V	
	C7305	QETC1HM-335ZN	E.CAPACITOR	3.3MF 20% 50V	
	C7315	QET41CM-107	E.CAPACITOR	100MF 20% 16V	
	C7322	QFLC1HJ-393ZM	M.CAPACITOR	.039MF 5% 50V	
	C7323	QET41AM-227	E.CAPACITOR	220MF 20% 10V	
	C7341	QET41CM-106	E.CAPACITOR	10MF 20% 16V	
	C7342	QETC1HM-104ZN	E.CAPACITOR	.10MF 20% 50V	
	C7343	QFLC1HJ-473ZM	M.CAPACITOR	.047MF 5% 50V	
	C7344	QFLC1HJ-104ZM	M.CAPACITOR	.10MF 5% 50V	
	C7345	QFLC1HJ-103ZM	M.CAPACITOR	.010MF 5% 50V	
	C7346	QFP31HJ-102ZM	PP.CAPACITOR	1000PF 5% 50V	
	C7347	QFP32AJ-123ZM	PP.CAPACITOR	.012MF 5% 100V	
	C7349	QCC31EM-393ZV	C.CAPACITOR	.039MF 20% 25V	
	C7350	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
	C7351	QFN41HJ-222	M.CAPACITOR	BIAS1	
	C7352	QFN41HJ-102	M.CAPACITOR	BIAS2	
	C7356	QCS11HJ-331	C.CAPACITOR	BIAS1	
	C7357	QCS11HJ-151	C.CAPACITOR	BIAS2	
	C7372	QET41AM-227	E.CAPACITOR	220MF 20% 10V	
	C8121	QETC1EM-226ZM	E.CAPACITOR	22MF 20% 25V	
	C8122	QFV41HJ-104ZM	FILM CAPACITOR	.10MF 5% 50V	
	C8123	QFV41HJ-104ZM	FILM CAPACITOR	.10MF 5% 50V	
	C8124	QET41AM-107	E.CAPACITOR	100MF 20% 10V	
	C8125	QET41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C8221	QETC1EM-226ZM	E.CAPACITOR	22MF 20% 25V	
	C8222	QFV41HJ-104ZM	FILM CAPACITOR	.10MF 5% 50V	
	C8223	QFV41HJ-104ZM	FILM CAPACITOR	.10MF 5% 50V	
	C8224	QET41AM-107	E.CAPACITOR	100MF 20% 10V	
	C8225	QET41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C8321	QET41CM-476	E.CAPACITOR	47MF 20% 16V	
	C8322	QET41CM-476	E.CAPACITOR	47MF 20% 16V	
	C8324	QET41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C8341	QET41EM-106	E.CAPACITOR	10MF 20% 25V	
	C8391	QET41HM-475	E.CAPACITOR	4.7MF 20% 50V	
	C9001	QCS11HJ-180	C.CAPACITOR	SUB CLOCK	
	C9002	QCS11HJ-180	C.CAPACITOR	SUB CLOCK	
	C9003	QCBB1HK-102Y	C.CAPACITOR	BEAT	
	C9004	QCBB1HK-102Y	C.CAPACITOR	BEAT	
	C9005	QCS11HJ-360	C.CAPACITOR	MAIN CLOCK	
	C9006	QCS11HJ-360	C.CAPACITOR	MAIN CLOCK	
	C9007	QCS11HJ-220	C.CAPACITOR	MAIN CLOCK	
	C9008	QCS11HJ-240	C.CAPACITOR	MAIN CLOCK	
	C9009	QCVB1CM-103Y	C.CAPACITOR	VDD	
	C9010	QET41CM-107	E.CAPACITOR	VDD	
	C9011	QCVB1CM-103Y	C.CAPACITOR	RESET	
	C9012	QETC1EM-226ZN	E.CAPACITOR	22MF 20% 25V	
	C9015	QCBB1HK-221Y	C.CAPACITOR	SUBQ	
	C9017	QET41EM-106	E.CAPACITOR	VOL	
	C9019	QET41EM-106	E.CAPACITOR	BASS	
	C9020	QET41EM-106	E.CAPACITOR	TRE	
	C9021	QFLC1HJ-104ZM	M.CAPACITOR	AVDD	
	C9023	QCBB1HK-101Y	C.CAPACITOR	XRST	

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C9030	QET41CM-476	E.CAPACITOR	PORT EXP	
	C9031	QCBB1HK-102Y	C.CAPACITOR	REM	
	C9032	QET41CM-476	E.CAPACITOR	47MF 20% 16V	
	C9033	QFLC1HJ-104ZM	M.CAPACITOR	US6VREG	
	C9034	QET41CM-107	E.CAPACITOR	100MF 20% 16V	
	C9036	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	C9037	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	C9040	QFV41HJ-104ZM	FILM CAPACITOR	.10MF 5% 50V	
	C9041	QET41EM-107	E.CAPACITOR	100MF 20% 25V	
	C9501	QCVB1CM-103Y	C.CAPACITOR	DRIVER	
	C9502	QET41CM-476	E.CAPACITOR	47MF 20% 16V	
	C9503	QET41CM-476	E.CAPACITOR	47MF 20% 16V	
	DI901	VGL1199-001	LCD		
	D3191	MTZ8.2JC	ZENER DIODE		
	D3192	1SS133	SI DIODE		
	D3193	1SS133	SI DIODE		
	D3261	MTZ5.1JB	ZENER DIODE		
	D3361	MTZ6.8JB	ZENER DIODE		
	D3362	MTZ5.1JC	ZENER DIODE		
	D3491	MTZ8.2JC	ZENER DIODE		
	D3492	1SS133	SI DIODE		
	D3493	1SS133	SI DIODE		
	D3571	MTZ7.5JA	Z.DIODE		
	D3791	MTZ6.2JAT-77	ZENER DIODE		
	D3891	1SS133	SI DIODE		
	D3892	1SS133	SI DIODE		
	D3893	1SS133	SI DIODE		
	D6301	RB721Q	DIODE		
	D6302	1SS133	SI DIODE		
	D6303	1SS133	SI DIODE		
	D7301	1SS133	SI DIODE		
	D7302	1SS133	SI DIODE		
	D7303	1SS133	SI DIODE		
	D8301	MTZ4.3JC	Z.DIODE		
	D8302	1SS133	SI DIODE		
	D8303	1SS133	SI DIODE		
	D9002	MTZ5.1JC	ZENER DIODE	BACK UP	
	D9003	1SS133	SI DIODE	US5V	
	D9004	1SS133	SI DIODE	BATT	
	D9005	1SS133	SI DIODE	PORT EXP	
	D9006	MTZ8.2JB	ZENER DIODE	US6VREG	
	D9010	1SS133	SI DIODE		
	D9501	1SR35-100A-T2	SI DIODE	SOL DRIVE	
	IC401	NJM4580L	IC	ADDER	
	IC501	BH3852S	IC	VOL&TONE	
⚠	IC601	LA4705NA	IC	BTL AMP	
	IC701	AN7345K	IC	PB/REC AMP	
	IC702	BA3126N	IC	HEAD SW	
	IC801	NJM4580L	IC	BB AMP	
	IC901	UPD78064GF-047	IC	SYSTEM MICON	
	IC902	BU4094BC	IC	PORT EXP.	
	IC903	GP1U281Y	REMOCON SENSOR		
	IC904	TA78DL06S	IC	US6VREG.	
	IC905	PST600H-T	IC	RESET	
	IC951	TA8409S	IC	LOAD M. DRIVE	

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	IC952	TA8409S	IC	U/D M. DRIVE	
	J6301	EMB90TV-401A	SPK TERMINAL		
	J6302	VMJ4026-001	HEADPHONE JACK		
	L4351	VQZ0048-009	INDUCTOR		
	L4352	VQZ0048-009	INDUCTOR		
	L4353	VQP0033-100Z	INDUCTOR		
	L6102	VQZ0048-007	INDUCTOR		
	L6202	VQZ0048-007	INDUCTOR		
	L7341	VQH1009-026	OSC COIL	COIL(=XC20)	
	L7371	VQP0033-100Z	INDUCTOR		
	L9001	VQP0033-100Z	INDUCTOR	VDD	
	L9002	VQP0033-100Z	INDUCTOR	AVDD	
	L9003	VQP0033-100Z	INDUCTOR	AVREF	
	L9006	VQZ0048-009	INDUCTOR	VSS	
	L9008	VQP0033-100Z	INDUCTOR		
	L9009	VQZ0048-009	INDUCTOR		
	L9010	VQP0018-4R7	INDUCTOR		
	L9011	VQP0018-4R7	INDUCTOR		
	L9012	VQP0018-4R7	INDUCTOR		
	L9013	VQP0018-4R7	INDUCTOR		
	L9015	VQP0018-4R7	INDUCTOR	POUT	
	L9501	VQP0018-100	INDUCTOR	CH-SW5V	
	PL901	VGZ0001-060	LAMP		
	Q3191	2SB772(Q,P)	TRANSISTOR		
	Q3192	2SC2785	TRANSISTOR		
	Q3193	2SC2785	TRANSISTOR		
	Q3261	2SB772(Q,P)	TRANSISTOR		
	Q3262	2SC2785	TRANSISTOR		
⚠	Q3361	2SC2785	TRANSISTOR	TUNER SW	
	Q3362	DTA114YS	TRANSISTOR		
	Q3491	2SB1274(R,S)	TRANSISTOR		
	Q3492	2SC2785	TRANSISTOR		
	Q3493	2SC2785	TRANSISTOR		
	Q3494	2SC2785	TRANSISTOR		
	Q3571	2SA952(L,K)	TRANSISTOR		
	Q3572	2SC2785	TRANSISTOR		
	Q3791	2SC2785	TRANSISTOR		
	Q3891	DTA114YS	TRANSISTOR		
	Q5303	DTC124ES	TRANSISTOR		
	Q7122	2SC2785	TRANSISTOR	REC MUTE	
	Q7222	2SC2785	TRANSISTOR	REC MUTE	
	Q7321	2SC2785	TRANSISTOR	R MUTE DRIVE	
	Q7341	2SC945L(P,Q)	TRANSISTOR		
	Q7342	2SC2001(L,K)	TRANSISTOR		
	Q7343	2SC2001(L,K)	TRANSISTOR		
	Q7344	2SC2001(L,K)	TRANSISTOR		
	Q7345	2SC2785	TRANSISTOR		
	Q7346	2SC2785	TRANSISTOR		
	Q8101	2SC2785	TRANSISTOR		
	Q8141	2SC2001(L,K)	TRANSISTOR		
	Q8201	2SC2785	TRANSISTOR		
	Q8241	2SC2001(L,K)	TRANSISTOR		
	Q8341	DTA114ES	TRANSISTOR	MUTE DRIV	
	Q8391	DTC115ES	TRANSISTOR		
	Q9001	2SC2668(O)	TRANSISTOR	MAIN CLOCK	

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	Q9002	2SC2668(O)	TRANSISTOR	MAIN CLOCK	
	Q9003	2SC3330	TRANSISTOR	BACK UP	
	Q9005	2SA1175	TRANSISTOR	+BCTL	
	Q9006	DTC144TSTP	TRANSISTOR	TU CTL	
	Q9007	DTC144TSTP	TRANSISTOR	TU CTL	
	Q9501	2SB562(B,C)	TRANSISTOR	SOL DRIVE	
	Q9502	DTC114TSTP	TRANSISTOR	UDM VOL CTL	
	Q9503	2SC2785	TRANSISTOR		
	R3191	QRD161J-821	CARBON RESISTOR	820 5% 1/6W	
	R3192	QRD161J-564	CARBON RESISTOR	560K 5% 1/6W	
	R3193	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
	R3194	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R3195	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R3196	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
	R3197	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R3198	QRD161J-104	CARBON RESISTOR	5	
	R3261	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
	R3262	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	R3263	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
	R3361	QRD161J-121	CARBON RESISTOR	120 5% 1/6W	
	R3362	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
	R3363	QRD161J-121	CARBON RESISTOR	120 5% 1/6W	
	R3490	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R3491	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
	R3492	QRD161J-564	CARBON RESISTOR	560K 5% 1/6W	
	R3493	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
	R3494	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R3495	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
	R3496	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R3497	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R3498	QRD161J-821	CARBON RESISTOR	820 5% 1/6W	
	R3499	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R3571	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R3572	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W	
	R3573	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R3574	QRD161J-121	CARBON RESISTOR	120 5% 1/6W	
	R3791	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R3792	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R3793	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R3891	QRZ0077-4R7X	FUSE RESISTOR	4.7 1/0W	
	R4141	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R4142	QRD161J-154	CARBON RESISTOR	150K 5% 1/6W	
	R4143	QRD161J-124	CARBON RESISTOR	120K 5% 1/6W	
	R4149	QRD161J-563	CARBON RESISTOR	56K 5% 1/6W	
	R4151	QRD161J-154	CARBON RESISTOR	150K 5% 1/6W	
	R4153	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R4155	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
	R4158	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
	R4241	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R4242	QRD161J-154	CARBON RESISTOR	150K 5% 1/6W	
	R4243	QRD161J-124	CARBON RESISTOR	120K 5% 1/6W	
	R4249	QRD161J-563	CARBON RESISTOR	56K 5% 1/6W	
	R4251	QRD161J-154	CARBON RESISTOR	150K 5% 1/6W	
	R4253	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R4255	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	

BLOCK NO. 02□□□□□

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R4258	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
	R4341	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R4342	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R4343	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
	R5115	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R5116	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
	R5215	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R5216	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
	R5306	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R5307	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R5308	QRD161J-154	CARBON RESISTOR	150K 5% 1/6W	
	R5309	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R5310	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R5311	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
	R6101	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
	R6102	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
	R6103	QRD161J-151	CARBON RESISTOR	150 5% 1/6W	
	R6104	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
	R6105	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R6106	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R6201	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
	R6202	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
	R6203	QRD161J-151	CARBON RESISTOR	150 5% 1/6W	
	R6204	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
	R6205	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R6206	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R6301	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R6302	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
	R6303	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
	R7103	QRD161J-220	CARBON RESISTOR	22 5% 1/6W	
	R7104	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
	R7106	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R7107	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R7121	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
	R7125	QRD161J-151	CARBON RESISTOR	150 5% 1/6W	
	R7126	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
	R7128	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	R7130	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
	R7131	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
	R7132	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R7133	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R7141	QRD161J-512	CARBON RESISTOR	5.1K 5% 1/6W	
	R7203	QRD161J-220	CARBON RESISTOR	22 5% 1/6W	
	R7204	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
	R7206	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R7207	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R7221	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
	R7225	QRD161J-151	CARBON RESISTOR	150 5% 1/6W	
	R7226	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
	R7228	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	R7230	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
	R7231	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
	R7232	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R7233	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R7241	QRD161J-512	CARBON RESISTOR	5.1K 5% 1/6W	

BLOCK NO. 02□□□□□

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R7301	QRD161J-151	CARBON RESISTOR	150 5% 1/6W	
	R7305	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R7315	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
	R7316	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R7321	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R7322	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
	R7324	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
	R7327	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
	R7341	QRZ0077-470	F. RES I M	47 1/0W	
	R7342	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
	R7343	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
	R7344	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R7345	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R7346	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R7349	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
	R7350	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
	R7351	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R7352	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R7354	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
	R7355	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
	R7361	QRD161J-394	CARBON RESISTOR	390K 5% 1/6W	
	R7362	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
	R7371	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R7372	QRD161J-563	CARBON RESISTOR	9K	
	R8121	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R8122	QRD161J-154	CARBON RESISTOR	150K 5% 1/6W	
	R8123	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R8124	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R8125	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W	
	R8126	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R8128	QRD161J-752	CARBON RESISTOR	7.5K 5% 1/6W	
	R8129	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R8130	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	R8131	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
	R8132	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R8141	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R8221	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R8222	QRD161J-154	CARBON RESISTOR	150K 5% 1/6W	
	R8223	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R8224	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R8225	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W	
	R8226	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R8228	QRD161J-752	CARBON RESISTOR	7.5K 5% 1/6W	
	R8229	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R8230	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	R8231	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
	R8232	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R8241	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R8321	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
	R8322	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R8325	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W	
	R8326	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R8341	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R8391	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
	R8392	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R9001	QRD161J-681	CARBON RESISTOR	MAIN-CLOCK	
	R9002	QRD161J-681	CARBON RESISTOR	MAIN-CLOCK	
	R9003	QRD161J-103	CARBON RESISTOR	RESET	
	R9005	QRD161J-104	CARBON RESISTOR	BACK UP	
	R9006	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R9007	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W	
	R9008	QRD161J-153	CARBON RESISTOR	SDATA	
	R9009	QRD161J-153	CARBON RESISTOR	SCK	
	R9010	QRD161J-102	CARBON RESISTOR	SDATA	
	R9011	QRD161J-102	CARBON RESISTOR	SCK	
	R9012	QRD161J-102	CARBON RESISTOR	SUBQ	
	R9013	QRD161J-102	CARBON RESISTOR	SQCK	
	R9014	QRD161J-103	CARBON RESISTOR	RESET	
	R9015	QRD161J-222	CARBON RESISTOR	DC PS	
	R9016	QRD161J-222	CARBON RESISTOR	LP PS	
	R9017	QRD161J-222	CARBON RESISTOR	8CM PS	
	R9018	QRD161J-222	CARBON RESISTOR	REM	
	R9019	QRD161J-222	CARBON RESISTOR	BEAT	
	R9020	QRD161J-103	CARBON RESISTOR	BACK UP	
	R9021	QRD167J-682	CARBON RESISTOR	+BCTL	
	R9022	QRD161J-103	CARBON RESISTOR	RECSW	
	R9023	QRD167J-562	CARBON RESISTOR	FCD	
	R9025	QRD161J-222	CARBON RESISTOR	SMUTE	
	R9026	QRD167J-682	CARBON RESISTOR	VOLUM	
	R9027	QRD161J-103	CARBON RESISTOR	BASS	
	R9028	QRD161J-103	CARBON RESISTOR	TRE	
	R9030	QRD161J-243	CARBON RESISTOR	BASS	
	R9031	QRD161J-243	CARBON RESISTOR	TRE	
	R9032	QRD161J-103	CARBON RESISTOR	KEY0	
	R9033	QRD161J-103	CARBON RESISTOR	KEY1	
	R9034	QRD161J-103	CARBON RESISTOR	KEY2	
	R9035	QRD161J-222	CARBON RESISTOR	REST	
	R9036	QRD161J-222	CARBON RESISTOR	LOAD	
	R9037	QRD161J-222	CARBON RESISTOR	DOWN	
	R9038	QRD161J-222	CARBON RESISTOR	KEY3	
	R9039	QRD161J-103	CARBON RESISTOR	SAFETY1	
	R9040	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
	R9041	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W	
	R9042	QRD161J-103	CARBON RESISTOR	PULL UP	
	R9043	QRD161J-103	CARBON RESISTOR	PULL UP	
	R9044	QRD161J-103	CARBON RESISTOR	PULL UP	
	R9045	QRD161J-103	CARBON RESISTOR	PULL UP	
	R9046	QRD161J-103	CARBON RESISTOR	PULL UP	
	R9047	QRD161J-103	CARBON RESISTOR	PULL UP	
	R9048	QRD161J-103	CARBON RESISTOR	PULL UP	
	R9049	QRD161J-103	CARBON RESISTOR	MPX	
	R9050	QRD161J-103	CARBON RESISTOR	PERIOD	
	R9051	QRD161J-103	CARBON RESISTOR	LED1	
	R9052	QRD161J-103	CARBON RESISTOR	LED2	
	R9053	QRD161J-103	CARBON RESISTOR	LED3	
	R9054	QRD161J-103	CARBON RESISTOR	LED4	
	R9055	QRD161J-103	CARBON RESISTOR	LED5	
	R9056	QRD161J-103	CARBON RESISTOR	LED6	
	R9057	QRD161J-103	CARBON RESISTOR	LED7	
	R9058	QRD161J-103	CARBON RESISTOR	LED8	
	R9059	QRD161J-103	CARBON RESISTOR	LED9	
	R9060	QRD161J-103	CARBON RESISTOR	LED10	
	R9061	QRD161J-822	CARBON RESISTOR	LCD BIAS	
	R9062	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R9063	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R9064	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R9065	QRD161J-102	CARBON RESISTOR	STAT	
	R9066	QRD161J-102	CARBON RESISTOR	XRST	
	R9070	QRD161J-103	CARBON RESISTOR	SCD	
	R9073	QRD161J-103	CARBON RESISTOR	LM F	
	R9074	QRD161J-103	CARBON RESISTOR	LM R	
	R9075	QRD161J-103	CARBON RESISTOR	UDM UP	
	R9076	QRD161J-103	CARBON RESISTOR	UDM DOWN	
	R9077	QRD161J-222	CARBON RESISTOR	UDM V	
	R9078	QRD161J-222	CARBON RESISTOR	SOL	
	R9079	QRD161J-103	CARBON RESISTOR	PIN	
	R9080	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R9081	QRD161J-222	CARBON RESISTOR	RECB	
	R9082	QRD161J-103	CARBON RESISTOR	AC/DC	
	R9083	QRD161J-103	CARBON RESISTOR	SAFETY2	
	R9084	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R9085	QRD161J-103	CARBON RESISTOR	LATCH	
	R9086	QRD161J-102	CARBON RESISTOR	SDATA	
	R9087	QRD161J-102	CARBON RESISTOR	SCK	
	R9088	QRD161J-103	CARBON RESISTOR	AHB	
	R9089	QRD161J-222	CARBON RESISTOR	PBM	
	R9090	QRD161J-222	CARBON RESISTOR	RECH	
	R9091	QRD161J-103	CARBON RESISTOR	A/B	
	R9092	QRD161J-103	CARBON RESISTOR	BIAS2	
	R9093	QRD161J-103	CARBON RESISTOR	BIAS1	
	R9094	QRD161J-103	CARBON RESISTOR	LIVE	
	R9095	QRD161J-103	CARBON RESISTOR	FTU	
	R9096	QRD161J-104	CARBON RESISTOR	RECSW PUP	
	R9097	QRD161J-273	CARBON RESISTOR	CD REST	
	R9098	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R9099	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R9100	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R9101	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R9105	QRD161J-102	CARBON RESISTOR	MPX	
	R9106	QRD161J-102	CARBON RESISTOR	PERIOD	
	R9107	QRD161J-102	CARBON RESISTOR	POUT	
	R9110	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R9111	QRD161J-242	CARBON RESISTOR	2.4K 5% 1/6W	
	R9112	QRD161J-102	CARBON RESISTOR	SDATA	
	R9113	QRD161J-102	CARBON RESISTOR	SCK	
	R9501	QRZ0076-100X	FUSI RESISTOR	DRIVER	
	R9502	QRD161J-181	CARBON RESISTOR	180 5% 1/6W	
	R9503	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R9504	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R9505	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
	R9506	QRD161J-563	CARBON RESISTOR	DC LIM	
	R9507	QRD161J-563	CARBON RESISTOR	UL LIM	
	R9508	QRD161J-273	CARBON RESISTOR	CLOSE	
	R9509	QRD161J-273	CARBON RESISTOR	UP	
	R9510	QRD161J-563	CARBON RESISTOR	DOWN	
	R9511	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R9512	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	VR741	QVPA603-502M	SEMI.V.RESISTOR	BIAS ADJ	
	VR761	QVPA603-102AZA	SEMI.V.RESISTOR	SPEED ADJ(X106)	
	X9001	VCX5000-002	CRYSTAL	SUB CLOCK	
	X9002	M2Z4.19	CERA LOCK	MAIN CLOCK	

CD amplifier board

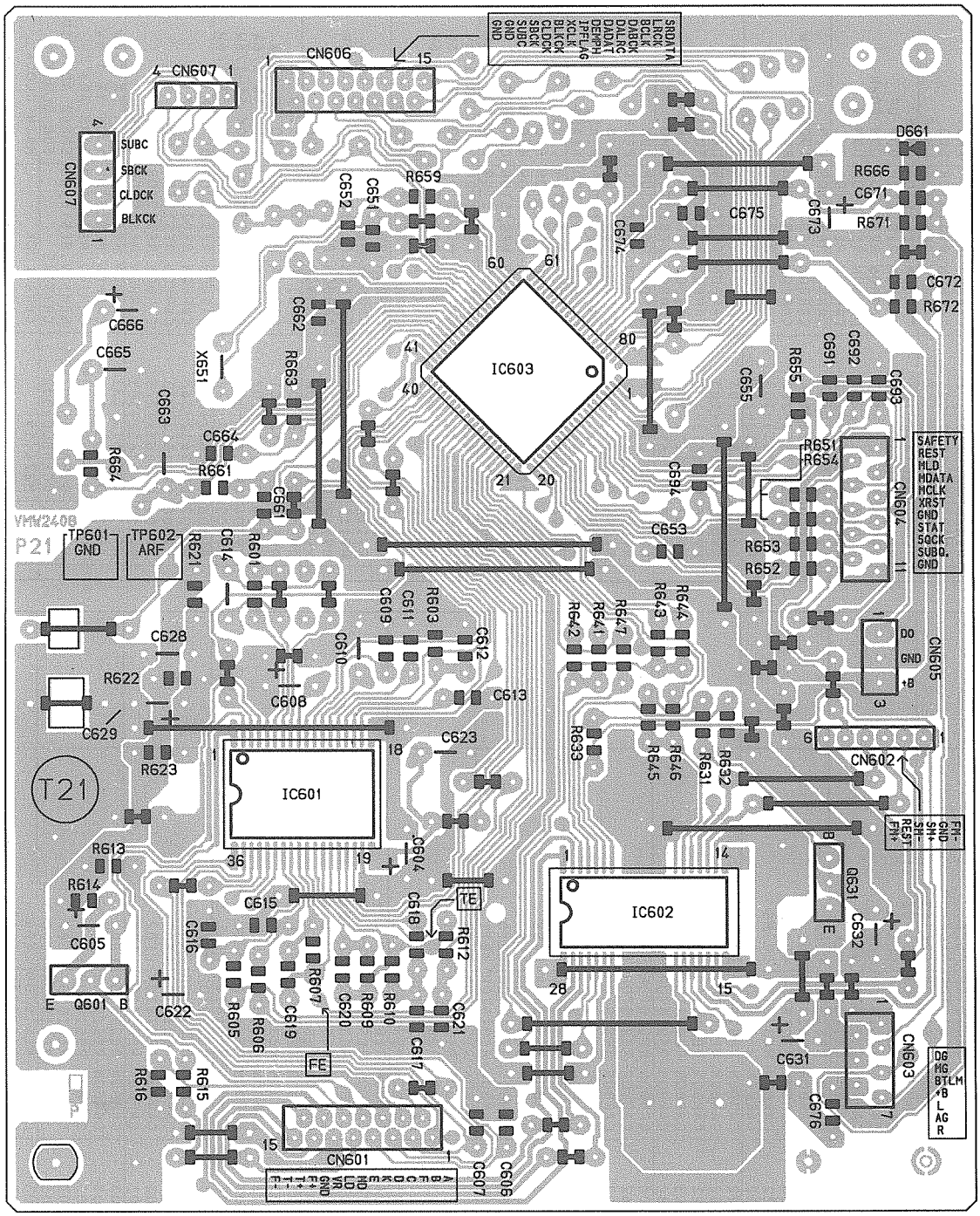


Fig.8-3

BLOCK NO. 04

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 604	QEK51AM-107	E CAPACITOR	100MF 20% 10V	
	C 605	QET41EM-106	E.CAPACITOR	10MF 20% 25V	
	C 606	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 607	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 608	QET41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C 609	QCBB1HK-101Y	C.CAPACITOR	100PF 10% 50V	
	C 610	QFLC1HJ-273ZM	M.CAPACITOR	.027MF 5% 50V	
	C 611	QCXB1CM-222Y	C.CAPACITOR	2200PF 20% 16V	
	C 612	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
	C 613	QCBB1HK-331Y	C.CAPACITOR	330PF 10% 50V	
	C 614	QFLC1HJ-104ZM	M.CAPACITOR	.10MF 5% 50V	
	C 615	QCHB1EZ-223	C.CAPACITOR	.022MF +80:-20%	
	C 616	QCHB1EZ-223	C.CAPACITOR	.022MF +80:-20%	
	C 617	QCHB1EZ-223	C.CAPACITOR	.022MF +80:-20%	
	C 618	QCXB1CM-222Y	C.CAPACITOR	2200PF 20% 16V	
	C 619	QCBB1HK-271Y	C.CAPACITOR	270PF 10% 50V	
	C 620	QCS11HJ-470	C.CAPACITOR	47PF 5% 50V	
	C 621	QCBB1HK-821Y	C.CAPACITOR	820PF 10% 50V	
	C 622	QET41AM-476	E.CAPACITOR	47MF 20% 10V	
	C 623	QFLC1HJ-104ZM	M.CAPACITOR	.10MF 5% 50V	
	C 628	QCC11EM-473V	C.CAPA. I.M	.047MF 20% 25V	
	C 629	QET41AM-107	E.CAPACITOR	100MF 20% 10V	
	C 631	QET41AM-477	E.CAPACITOR	470MF 20% 10V	
	C 632	QEK51AM-107	E CAPACITOR	100MF 20% 10V	
	C 651	QCS11HJ-120	C.CAPACITOR	12PF 5% 50V	
	C 652	QCS11HJ-150	C.CAPACITOR	15PF 5% 50V	
	C 653	QCHB1EZ-223	C.CAPACITOR	.022MF +80:-20%	
	C 655	QCC11EM-473V	C.CAPA. I.M	.047MF 20% 25V	
	C 661	QCBB1HK-471Y	C.CAPACITOR	470PF 10% 50V	
	C 662	QCHB1EZ-223	C.CAPACITOR	.022MF +80:-20%	
	C 663	QFLC1HJ-223ZM	M.CAPACITOR	.022MF 5% 50V	
	C 664	QCHB1EZ-223	C.CAPACITOR	.022MF +80:-20%	
	C 665	QFV71HJ-334ZM	FILM CAPACITOR	.33MF 5% 50V	
	C 671	QCXB1CM-222Y	C.CAPACITOR	2200PF 20% 16V	
	C 672	QCXB1CM-222Y	C.CAPACITOR	2200PF 20% 16V	
	C 673	QET41AM-227	E.CAPACITOR	220MF 20% 10V	
	C 674	QCHB1EZ-223	C.CAPACITOR	.022MF +80:-20%	
	C 675	QCBB1HK-102Y	C.CAPACITOR	AG-DG	
	C 676	QCBB1HK-102Y	C.CAPACITOR	AG-DG	
	C 691	QCBB1HK-151Y	C.CAPACITOR	DENGEN NOISE	
	C 692	QCBB1HK-151Y	C.CAPACITOR	DENGEN NOISE	
	C 693	QCBB1HK-151Y	C.CAPACITOR	DENGEN NOISE	
	C 694	QCBB1HK-151Y	C.CAPACITOR	DENGEN NOISE	
	CN601	EMV7144-015R	15PIN CONNECTOR	TO RF	
	CN602	EMV5109-006A	6P PLUG ASSY	TO MOTOR	
	CN603	VMC0163-R07	CONNECTOR	TO AUDIO	
	CN604	VMC0163-R11	CONNECTOR	TO MICON	
	CN605	VMC0041-003	CONNECTOR	TO DIGITAL OUT	
	D 661	1SS133	SI DIODE		
	IC601	AN8806SB	IC	RF AMP	
⚠	IC602	BA6897FP	IC	DRIVER	
	IC603	MN35510	IC	1CHIP PROCESSER	
	Q 601	2SA952(L,K)	TRANSISTOR		
	Q 631	2SA952(L,K)	TRANSISTOR		
	R 601	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	

BLOCK NO. 04

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 603	QRD161J-125	CARBON RESISTOR	1.2M 5% 1/6W	
	R 605	QRD167J-134	C.RES. I.M	130K 5% 1/6W	
	R 606	QRD161J-913	CARBON RESISTOR	91K 5% 1/6W	
	R 607	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
	R 609	QRD161J-114	C.RES. I.M	110K 5% 1/6W	
	R 610	QRD161J-154	CARBON RESISTOR	150K 5% 1/6W	
	R 612	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 613	QRD161J-121	CARBON RESISTOR	120 5% 1/6W	
	R 614	QRD161J-100	CARBON RESISTOR	10 5% 1/6W	
	R 615	QRD161J-120	CARBON RESISTOR	12 5% 1/6W	
	R 616	QRD161J-910Y	CARBON RESISTOR	91 5% 1/6W	
	R 621	QRD161J-330	CARBON RESISTOR	33 5% 1/6W	
	R 622	QRD161J-330	CARBON RESISTOR	33 5% 1/6W	
	R 623	QRD161J-330	CARBON RESISTOR	33 5% 1/6W	
	R 631	QRD161J-331	CARBON RESISTOE	330 5% 1/6W	
	R 632	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
	R 633	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
	R 641	QRD161J-563	CARBON RESISTOR	56K 5% 1/6W	
	R 642	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
	R 643	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
	R 644	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R 645	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R 646	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
	R 647	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	R 651	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 652	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 653	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 654	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 655	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
	R 659	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
	R 661	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R 663	QRD161J-124	CARBON RESISTOR	120K 5% 1/6W	
	R 664	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
	R 666	QRD161J-220	CARBON RESISTOR	22 5% 1/6W	
	R 671	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 672	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	X 651	VCX5016-934V	CRYSTAL	16.9344MHZ	

■ Power supply/key switch board

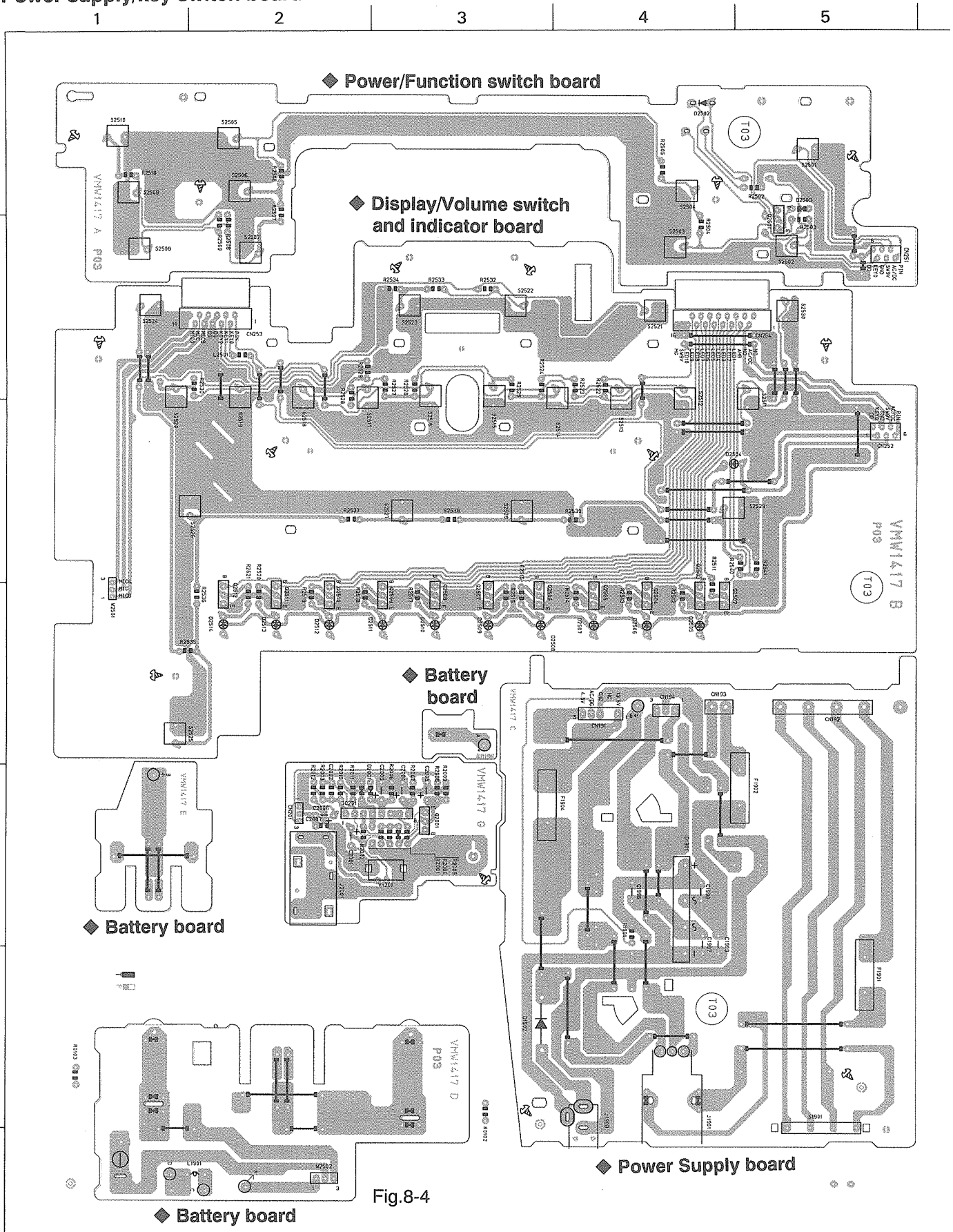


Fig.8-4

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	CN191	VMC0041-005	CONNECTOR		
	CN192	VMZ0049-B04	CONNECTOR		
	CN193	VMZ0049-A02	CONNECTOR		
	CN194	VMC0041-003	CONNECTOR		
	CN201	VMC0075-003	CONNECTOR		
	CN251	VMC0163-R06	CONNECTOR	KEYA-KEYB	
	CN252	VMC0163-R06	CONNECTOR	KEYA-KEYB	
	CN253	VMC0340-P10	CONNECTOR	SW-MAIN	
	CN254	VMC0340-P16	CONNECTOR	SW-MAIN	
	C1996	QFV71HJ-683ZM	FILM CAPACITOR	.068MF 5% 50V	
	C1997	QFV71HJ-683ZM	FILM CAPACITOR	.068MF 5% 50V	
	C1998	QFV71HJ-683ZM	FILM CAPACITOR	.068MF 5% 50V	
	C1999	QFV71HJ-683ZM	FILM CAPACITOR	.068MF 5% 50V	
	C2001	QETC1HM-225ZN	E.CAPACITOR	2.2MF 20% 50V	
	C2002	QCS11HJ-150	C.CAPACITOR	HI-CUT	
	C2003	QEK51HM-475	E CAPACITOR	ALC	
	C2004	QET41AM-107	E.CAPACITOR	VCC	
	C2005	QET41AM-227	E.CAPACITOR	220MF 20% 10V	
	C2006	QFN81HJ-562	M.CAPACITOR	5600PF 5% 50V	
	C2007	QCXB1CM-472Y	C.CAPACITOR	4700PF 20% 16V	
⚠⚠	D1901	D5SBA20-4003	SI DIODE		
⚠⚠	D1902	1N5401TM	SI DIODE	FOR DC	
	D2001	1SS133	SI DIODE		
	D2502	SLR-325VCT31	LED	STAND-BY LED	
	D2503	1SS133	SI DIODE	FOR STAND-BY	
	D2504	SLZ-981C09-T6	LED	AHB	
	D2505	SLZ-981C09-T6	LED	DISC1	
	D2506	SLZ-981C09-T6	LED	DISC2	
	D2507	SLZ-981C09-T6	LED	DISC3	
	D2508	SLZ-981C09-T6	LED	DISC4	
	D2509	SLZ-981C09-T6	LED	DISC5	
	D2510	SLZ-981C09-T6	LED	DISC6	
	D2511	SLZ-981C09-T6	LED	DISC7	
	D2512	SLZ-981C09-T6	LED	DISC8	
	D2513	SLZ-981C09-T6	LED	DISC9	
	D2514	SLZ-981C09-T6	LED	DISC10	
	IC201	BA15218N	IC	MIC AMP	
	J1901	QMC0263-004BS	AC SOCKET		
	J1998	QMA431B-V01	FILM CAPACITOR		
	J2001	QMS6022-V02	JACK	SAME AS PC-X55	
	L1901	VQZ0048-009	INDUCTOR		
	L2501	VQP0018-4R7	INDUCTOR		
	Q2001	2SD2144S(VW)	TRANSISTOR	ATT	
	Q2501	DTA124TSTP	TRANSISTOR TAPE	STAND-BY LED	
	Q2502	DTC114TSTP	TRANSISTOR	AHB	
	Q2503	DTC114TSTP	TRANSISTOR	D1LED	
	Q2504	DTC114TSTP	TRANSISTOR	D2LED	
	Q2505	DTC114TSTP	TRANSISTOR	D3LED	
	Q2506	DTC114TSTP	TRANSISTOR	D4LED	
	Q2507	DTC114TSTP	TRANSISTOR	D5LED	
	Q2508	DTC114TSTP	TRANSISTOR	D6LED	
	Q2509	DTC114TSTP	TRANSISTOR	D7LED	
	Q2510	DTC114TSTP	TRANSISTOR	D8LED	
	Q2511	DTC114TSTP	TRANSISTOR	D9LED	
	Q2512	DTC114TSTP	TRANSISTOR	D10LED	
	R1901	QRD161J-103	CARBON RESISTOR	AC/DC	
	R2001	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R2002	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R2003	QRD161J-334	CARBON RESISTOR	330K 5% 1/6W	
	R2004	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
	R2005	QRD161J-561	CARBON RESISTOR	560 5% 1/6W	
	R2006	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W	
	R2007	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
	R2008	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
	R2009	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R2010	QRD161J-470	CARBON RESISTOR	47 5% 1/6W	
	R2011	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
	R2012	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
	R2502	QRD161J-331	CARBON RESISTOE	STAND-BY	
	R2503	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R2504	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R2505	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
	R2506	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
	R2507	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R2508	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
	R2509	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
	R2510	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	R2511	QRD161J-331	CARBON RESISTOE	330 5% 1/6W	
	R2512	QRD161J-331	CARBON RESISTOE	330 5% 1/6W	
	R2513	QRD161J-331	CARBON RESISTOE	330 5% 1/6W	
	R2514	QRD161J-331	CARBON RESISTOE	330 5% 1/6W	
	R2515	QRD161J-331	CARBON RESISTOE	330 5% 1/6W	
	R2516	QRD161J-331	CARBON RESISTOE	330 5% 1/6W	
	R2517	QRD161J-331	CARBON RESISTOE	330 5% 1/6W	
	R2518	QRD161J-331	CARBON RESISTOE	330 5% 1/6W	
	R2519	QRD161J-331	CARBON RESISTOE	330 5% 1/6W	
	R2520	QRD161J-331	CARBON RESISTOE	330 5% 1/6W	
	R2521	QRD161J-331	CARBON RESISTOE	330 5% 1/6W	
	R2522	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R2523	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R2524	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
	R2525	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
	R2526	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R2527	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
	R2528	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
	R2529	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	R2530	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R2532	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R2533	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R2534	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
	R2535	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
	R2536	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R2537	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
	R2538	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
	R2539	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	R2540	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R2541	QRD161J-393	CARBON RESISTOR	FOR U9K	
⚠	S1901	VMZ0126-002	VOLTAGE SELCTOR		
	S2501	QSQ4H11-V10Z	TACT SWITCH	POWER	
	S2502	QSQ4H11-V10Z	TACT SWITCH	TUNER	
	S2503	QSQ4H11-V10Z	TACT SWITCH	CLOCK	
	S2504	QSQ4H11-V10Z	TACT SWITCH	TIMER	
	S2505	QSQ4H11-V10Z	TACT SWITCH	DEMO	
	S2506	QSQ4H11-V10Z	TACT SWITCH	CONTINUE	
	S2507	QSQ4H11-V10Z	TACT SWITCH	PROGRAM	
	S2508	QSQ4H11-V10Z	TACT SWITCH	TRACK	
	S2509	QSQ4H11-V10Z	TACT SWITCH	B.SKIP	
	S2510	QSQ4H11-V10Z	TACT SWITCH	F.SKIP	
	S2511	QSQ4H11-V10Z	TACT SWITCH	DISC1	
	S2512	QSQ4H11-V10Z	TACT SWITCH	DISC2	
	S2513	QSQ4H11-V10Z	TACT SWITCH	DISC3	
	S2514	QSQ4H11-V10Z	TACT SWITCH	DISC4	
	S2515	QSQ4H11-V10Z	TACT SWITCH	DISC5	
	S2516	QSQ4H11-V10Z	TACT SWITCH	DISC6	
	S2517	QSQ4H11-V10Z	TACT SWITCH	DISC7	
	S2518	QSQ4H11-V10Z	TACT SWITCH	DISC8	
	S2519	QSQ4H11-V10Z	TACT SWITCH	DISC9	
	S2520	QSQ4H11-V10Z	TACT SWITCH	DISC10	
	S2521	QSQ4H11-V10Z	TACT SWITCH	DISP	
	S2522	QSQ4H11-V10Z	TACT SWITCH	STOP	
	S2523	QSQ4H11-V10Z	TACT SWITCH	PLAY	
	S2524	QSQ4H11-V10Z	TACT SWITCH	+10	
	S2525	QSQ4H11-V10Z	TACT SWITCH	OP/CL	
	S2526	QSQ4H11-V10Z	TACT SWITCH	SOUND	
	S2527	QSQ4H11-V10Z	TACT SWITCH	VOL+	
	S2528	QSQ4H11-V10Z	TACT SWITCH	VOL-	
	S2529	QSQ4H11-V10Z	TACT SWITCH	AHB	
	S2530	QSQ4H11-V10Z	TACT SWITCH	PRESET	
	VR201	QVAA46B-V03M	V.RESISTOR	SAME AS PC-XC50	

9 Exploded View of Enclosure Assembly

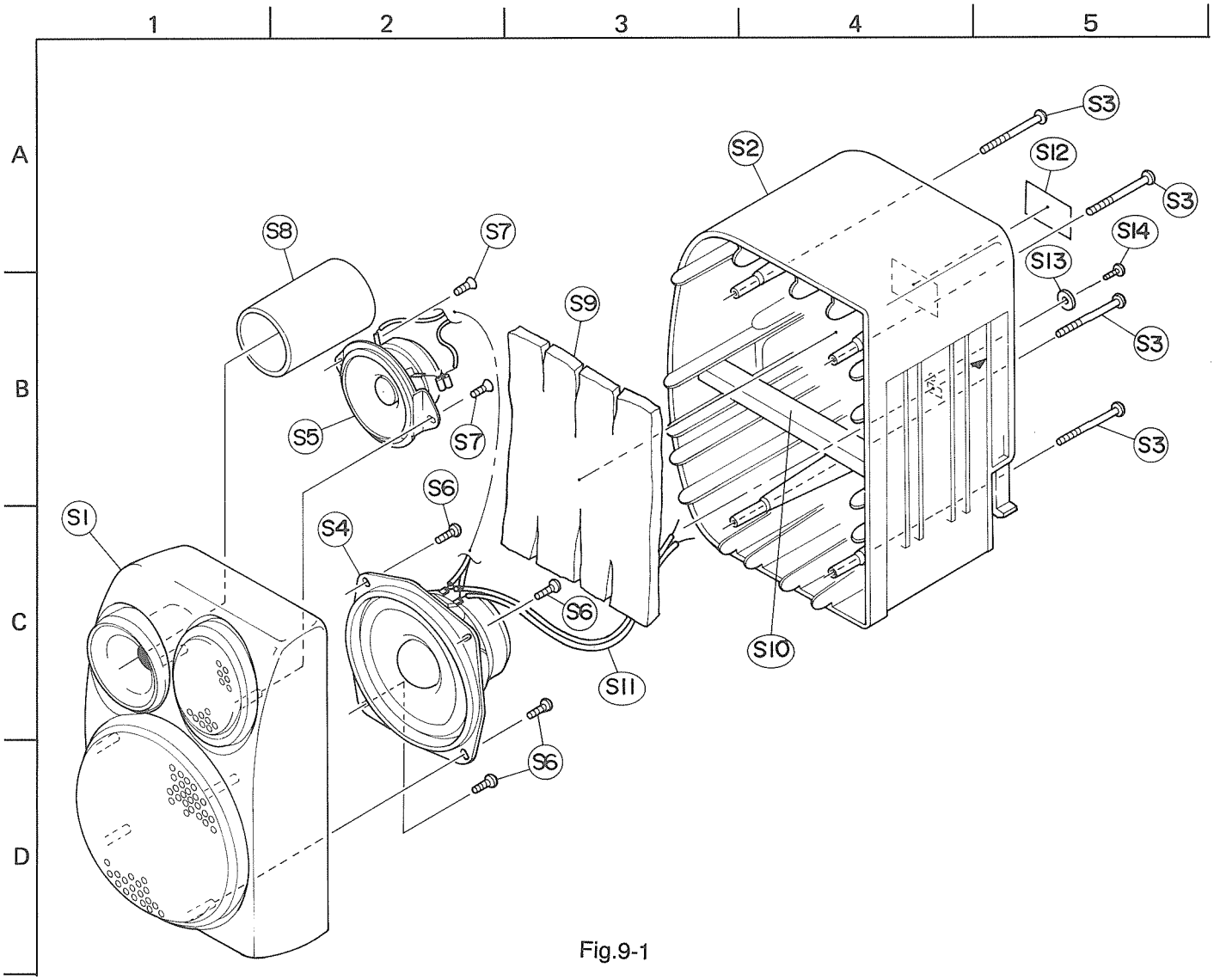


Fig.9-1

● Speaker section parts list

BLOCK NO. M4MM□□□

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	S 1	VJC2569-00A	F.PANEL ASSY(L)		1		
		VJC2570-00A	F.PANEL ASSY(R)		1		
	S 2	VJG1289-002	SP R.CABINET(L)		1		
		VJG1290-003	SP.R.CABINET(R)		1		
	S 3	SBSF3035Z	SCREW	F.PANEL+R.CAB	4		
	S 4	VGS1201-012	SPEAKER	WOOFER	1		
	S 5	VGS0501-007	SPEAKER	TWEETER	1		
	S 6	GBSF3010Z	TAPPING SCREW	FOR WOOFER SP	4		
	S 7	SSSF3010Z	SCREW	FOR TWEETER SP	2		
	S 8	VKZ4778-001	DUCT		1		
	S 9	VKZ4742-001	SOUND ABSOBER		1		
	S 10	VYH7914-001	STAY		1		
	S 11	VMP0040-002T	SPK CORD	FOR SPEAKER	1		
	S 12	VYN7073-M001B	NAME PLATE		1		
	S 13	VYSS2R7-006	SPACER	RIGHT SIDE	1		
	S 14	GBSF3008M	SCREW	RIGHT SIDE	1		

SAME AS PC-XC50
V.RESISTOR
VR201 QVAA46B-V03M
CARBON RESISTOR STAND-BY
CARBON RESISTOR 1.0K 5% 1/6W
R2502 QRD161J-331
R2503 QRD161J-102

■ Enclosure assembly section

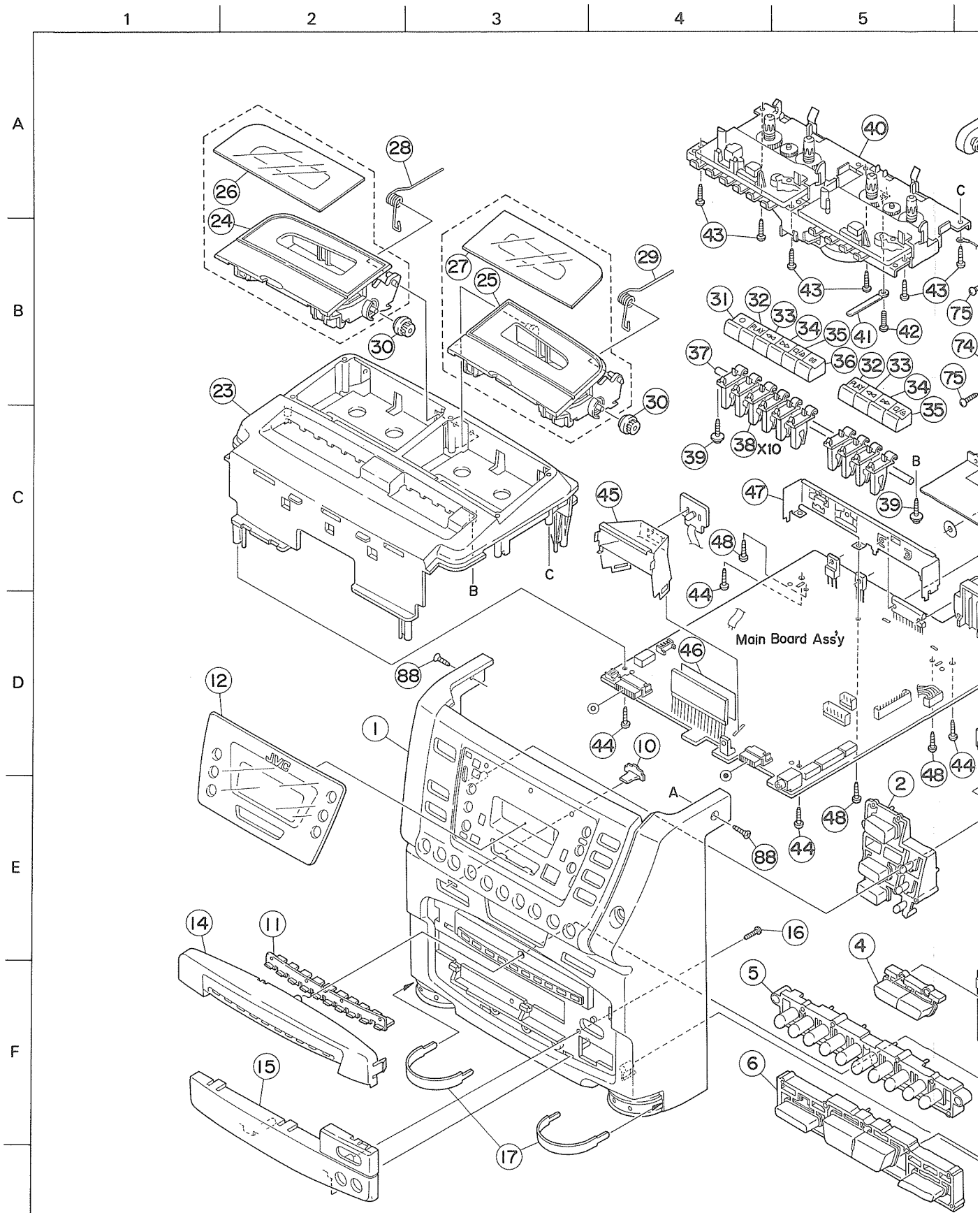
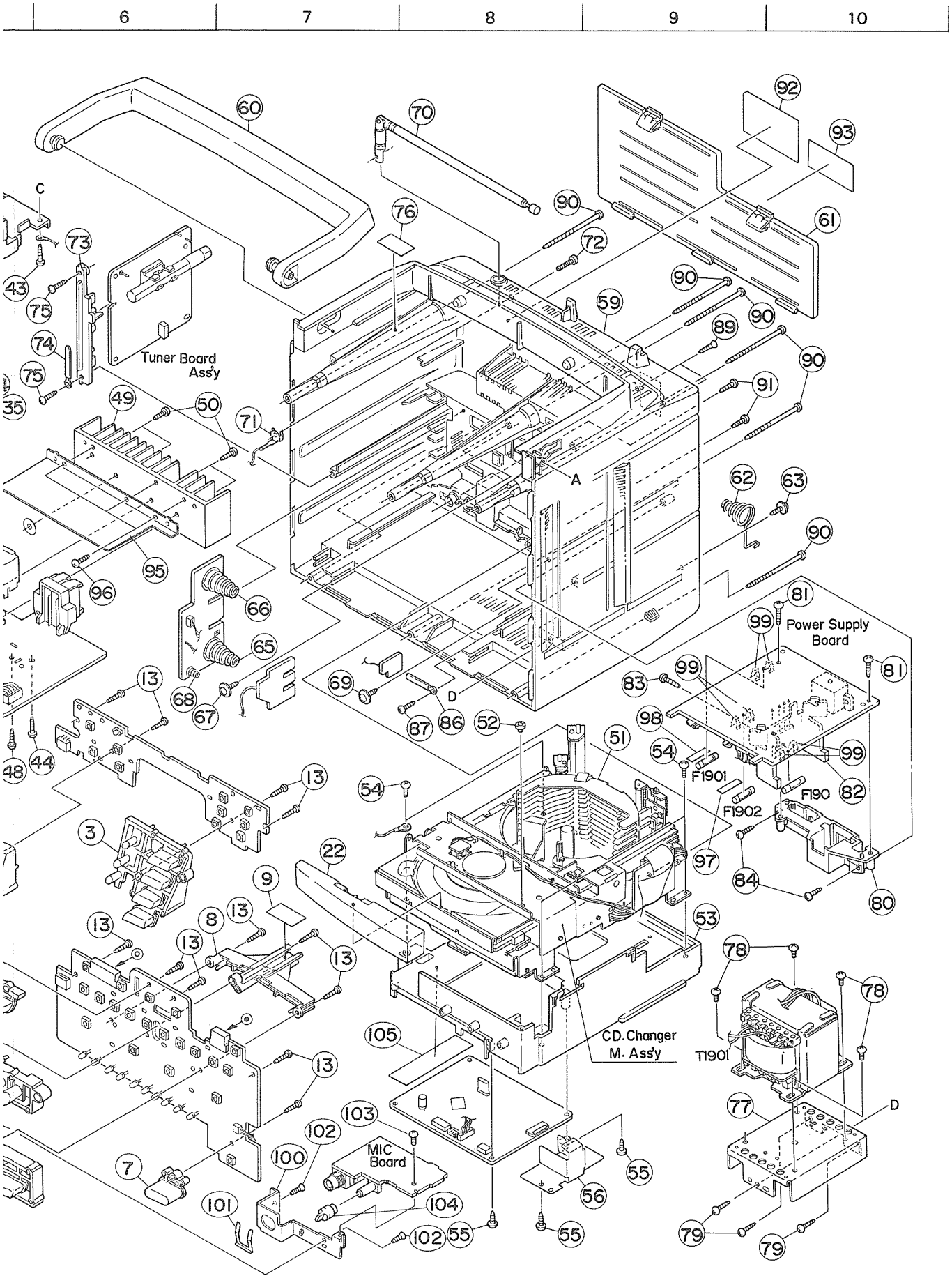


Fig.9-2


6
7
8
9
10
Tuner Board Ass'y
Power Supply Board
MIC Board
CD. Changer M. Ass'y
A
C
D
F1901
F1902
F190
T1901

● Enclosure assembly section parts list

BLOCK NO. M2MM

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	A	ZCPRXC70K-CBA	C.DOOR ASS'Y(A)	NO.24,26	1		
	B	ZCPRXC70K-CBB	C.DOOR ASS'Y(B)	NO.25,27	1		
	1	VJG1406-002	FRONT CABINET		1		
	2	VXP3790-001	PUSH BUTTON(A)	POWER	1		
	3	VXP3791-001	PUSH BUTTON(B)	BAND SEARCH	1		
	4	VXP5331-001	PUSH BUTTON(C)	CD PLAY/STOP	1		
	5	VXP3792-001	PUSH BUTTON(D)	10 KEY	1		
	6	VXP3793-001	PUSH BUTTON(E)	VOLUME/AHB	1		
	7	VXP5332-001	EJECT BUTTON	PRINT-1,SILK-1	1		
	8	VYH3928-001	FRONT HOLDER		1		
	9	VYSA1R4-076	SPACER		1		
	10	VJK4481-001	AHB LENS		1		
	11	VJK3690-001	INDICATER LENS		1		
	12	VJD3996-001	LCD LENS		1		
	13	SBSF2610Z	SCREW	F.CAB+SW PWB	12		
	14	VJD3997-001	FRONT COVER(A)		1		
	15	VJD3998-002	FRONT COVER(B)		1		
	16	SBSF2610Z	SCREW		1		
	17	VJD5483-002	FOOT PLATE		2		
	22	VJE3002-001	TRAY FITTING		1		
	23	VJG1409-002	TOP COVER		1		
	24	VJT2370-001	CASSETTE DOOR L		1		
	25	VJT2370-002	CASSETTE DOOR R		1		
	26	VJT4232-001	DOOR LENS L		1		
	27	VJT4233-001	DOOR LENS R		1		
	28	VKW5218-001	DOOR SPRING		1		
	29	VKW5230-001	DOOR SPRING (R)		1		
	30	VYH7366-001MM	GEAR		2		
	31	VXP2116-001	MECHA BUTTON	REC	1		
	32	VXP2116-002	MECHA BUTTON	PLAY	2		
	33	VXP2116-003	MECHA BUTTON	REW	2		
	34	VXP2116-004	MECHA BUTTON	FF	2		
	35	VXP2116-005	MECHA BUTTON	STOP/EJECT	2		
	36	VXP2116-006	MECHA BUTTON	PAUSE	1		
	37	VYH7877-001	-001MM		1		
	38	VYH7883-002	BUTTON LEVER		10		
	39	E65923-001	TAPPING SCREW		2		
	40	----------	CASSETTE MA(W)		1		
	41	VKZ4001-111	WIRE HOLDER	TO CASS MECHA	1		
	42	SBST3006Z	SCREW	FOR WIRE HOLDER	1		
	43	SBSF3010Z	SCREW	TOP+MECHA	6		
	44	SBSF3010Z	SCREW	TOP+ MAIN PWB	4		
	45	VYH3926-001	LCD HOLDER		1		
	46	VYH8059-001	SHEET		1		
	47	VYH3921-001	IC HOLDER		1		
	48	SBST3006Z	SCREW	FOR IC HOLDER	3		
	49	VYH3892-004	HEAT SINK(AMP)		1		
	50	SBST3012Z	SCREW	HEAT SINK+IC HO	4		
	51	----------	CHANGER MECHA		1		
	52	VKS5503-001	GUIDE PIN		1		
	53	VYH1259-001	CHG MECHA STAND		1		
	54	SBSF3010Z	SCREW	CHG MEHA+STAND	4		
	55	SBSF3010Z	SCREW	CD AMP PWB+STAN	2		
	56	VMA4699-001	SHIELD		1		
	59	VJG1403-002	REAR CABINET		1		

BLOCK NO. M2MM

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	60	VJH2016-002	HANDLE		1		
	61	VJC2566-001	BATTERY COVER		1		
	62	VYH5657-008	BATTERY SPRING		1		
	63	E65923-004	TAPPING SCREW	FOR BATTE SP.	1		
	65	VYH5483-001	BATTERY SPRING	ON BAT.PWB1 R20	1		
	66	VYH5483-004	SPRING		1		
	67	E65923-001	TAPPING SCREW	FOR BAT.PWB2 R2	1		
	68	VYH7199-001	BATTERY SPRING	ON BAT.PWB1 ,R6	1		
	69	E65923-001	TAPPING SCREW	FOR BAT.PWB3,R6	1		
⚠	70	FMJA3001-00A(D)	ROD ANT ASS'Y		1		
	71	VYH5012-005SS	TERMINAL LUG	FOR ROD ANTENNA	1		
	72	SDSP3016N	SCREW	FOR ROD ANTENNA	1		
	73	VYH8050-001	TUNER HOLDER		1		
	74	VKZ4001-111	WIRE HOLDER	FOR TUNER WIRE	1		
	75	SBSF3014Z	SCREW	FOR TUNER HOL	2		
	76	VYSA1R4-056	SPACER	FOR ANT WIRE	1		
	77	VYH8063-001	TRANS BKT.		1		
	78	SBST4006Z	SCREW	TRANS+TR.BKT	4		
	79	SBSF3010Z	SCREW	TR.BKT SA+R.CAB	3		
	80	VYH3922-001	AC JACK HOLDER		1		
	81	SBSF3010Z	SCREW	AC JACK HOL+PWB	2		
	82	VYH8054-001	HEAT SINK(PRI)		1		
	83	SBSF3010Z	SCREW	IC + HEAT SINK	1		
	84	SBSF3010Z	SCREW	AC JAC HOL+R.CA	2		
	86	VKZ4001-111	WIRE HOLDER	FOR BATTERY WIR	1		
	87	SBSF3010Z	SCREW	FOR WIRE HOLDER	1		
	88	SSSF3010M	SCREW	FR+REAR --SIDE	2		
	89	SBSF3010Z	SCREW	SP JACK --REAR	2		
	90	SBSF3050Z	SCREW	FR;REAR --REAR	6		
	91	SBSF3010Z	SCREW	C.M.STAND-RAER	2		
⚠	92	VYN7073-M007T	NAME PLATE		1	U	
⚠		VYN7073-M014T	NAME PLATE		1	US	
	93	E70891-001	CLASS 1 LABEL		1	US	
	95	VYH8111-001MM	HEAT SINK PLATE		1		
	96	SBSG3008CC	T.SCREW		3		
	97	VND4003-050	FUSE LABEL	T6.3A	1		
⚠	98	VND4003-029	FUSE LABEL	FOR F1901	1		
⚠	99	EMG7331-003Z	FUSE CLIP	FOR FUSE	6		
	100	VYH8058-001	MIC BRACKET		1		
	101	VKL6752-001	SNAP PLATE		1		
	102	SSSF2608Z	SCREW		2		
	103	SBST3006Z	SCREW		1		
	104	VXL4431-001	VOLUME KNOB		1		
	105	E406709-001	LASER CAUTION		1	US	
⚠	F1901	QMF51E2-R80SBS	FUSE	PRI	1		
⚠	F1902	QMF51E2-6R3J1	FUSE	2ND	1		
⚠	F1904	QMF51E2-6R3J1	FUSE	DC	1		
⚠	T1901	VTP66G2-12K	POWER TRANS		1		

10 Exploded View of Mechanism Assembly

CD changer assembly

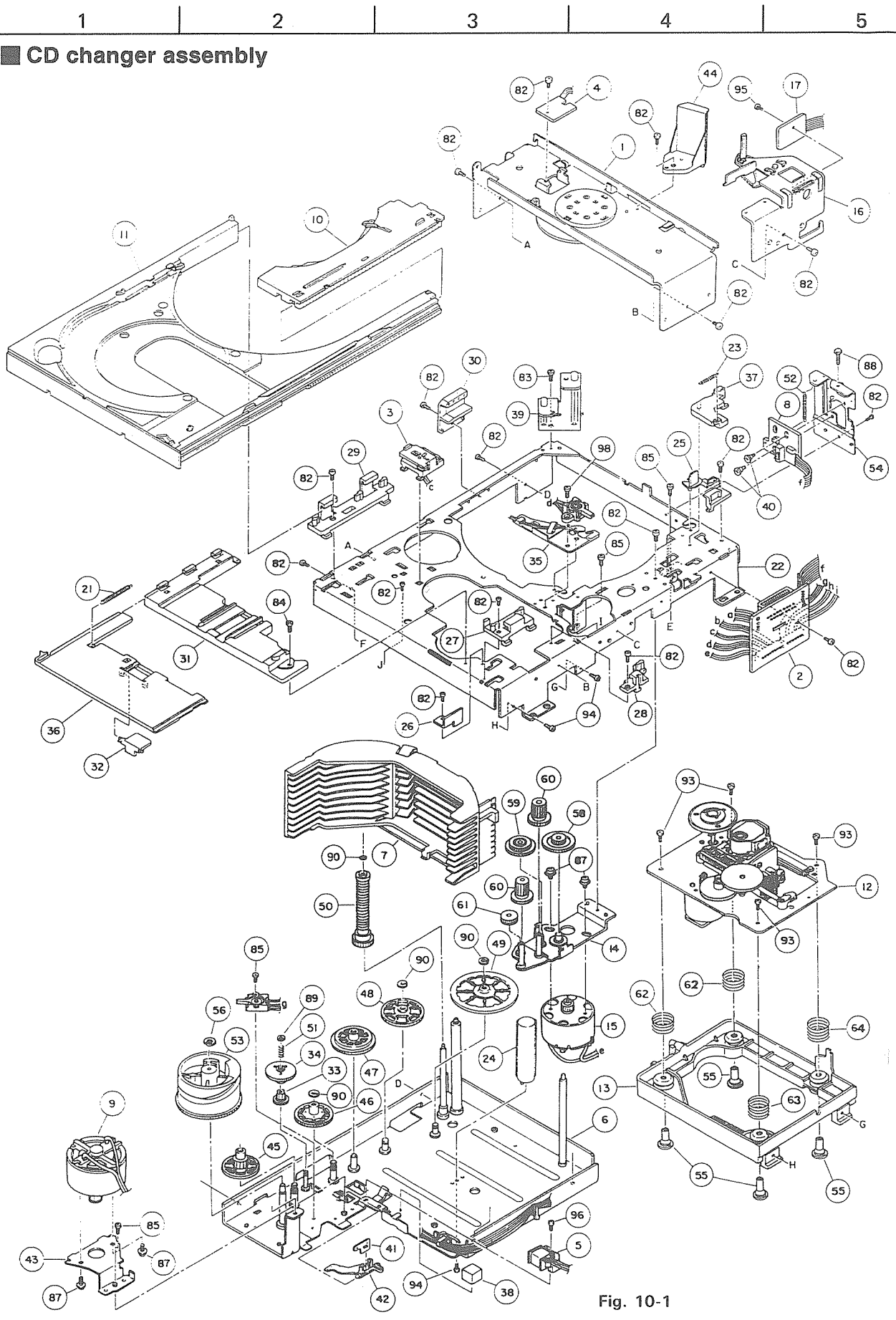


Fig. 10-1

● CD changer assembly parts list

BLOCK NO. M2MM

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	1	300701318ZT	CLUMPER BKT ASS		1		
	2	----------	CON.PCB ASS'Y		1		
	3	----------	D.S.PCB ASS'Y(A		1		
	4	----------	D.S.PCB ASS'Y(B		1		
	5	300702317ZT	COIL ASS'Y		1		
	6	300702512ZT	GEAR CHAS.ASS'Y		1		
	7	300702320ZT	DISC CASE ASS'Y		1		
	8	----------	E.S PCB ASS'Y		1		
	9	300702302T	E MOTOR ASS'Y		1		
	10	300706316ZT	L.PLATE ASS'Y		1		
	11	300706317ZT	DISC BASE ASS'Y		1		
	12	----------	TRA.MECHA ASS'Y		1		
	13	----------	T.T.BASE H.ASY.		1		
	14	300711501T	L GEAR BKT.ASY.		1		
	15	300711301T	L MOTOR ASS'Y		1		
	16	300711306ZT	GUIDE PLATE ASY		1		
	17	----------	L SEN.PCB ASY		1		
	21	30070187T	C.PLATE SPRING	COVER PLATE SPR	1		
	22	30070185T	CHASSIS		1		
	23	30070144T	L.LEVER SPRING	LOCK LEVER SPR	1		
	24	30070179T	DISC STOPPER D		1		
	25	30070186T	GUIDE R4		1		
	26	30070149T	DISC BASE BKT		1		
	27	30070150T	GUIDE R1(S)		1		
	28	30070151T	GUIDE R2(S)		1		
	29	30070153T	GUIDE L1(S)		1		
	30	30070106T	GUIDE L2(S)		1		
	31	30070155T	COVER PLATE B		1		
	32	30070156T	DISC STOPPER(S)		1		
	33	300702111T	E GEAR G2(P)A	FLOATING	1		
	34	30070256T	E GEAR G2(S)B	FLOATING	1		
	35	30070184T	SW BASE		1		
	36	30070162T	COVER PLATE A		1		
	37	30070163T	LOCK LEVER		1		
	38	300702116T	CUSHION		1		
	39	30070298T	WORM GEAR BKT		1		
	40	19001204T	COLLAR SCREW		2		
	41	30070296T	E CONTROL PLATE	RF CLUTCH	1		
	42	30070292T	E CONTROL LEVER		1		
	43	300702100T	E MOTOR BRACKET		1		
	44	30070175T	GUIDE STOPPER		1		
	45	30070277T	E GEAR G3		1		
	46	300702122T	E GEAR G5		1		
	47	30070279T	E GEAR G6		1		
	48	300702113T	E GEAR G7		1		
	49	30070293T	E GEAR G8		1		
	50	300702112T	E GEAR G9		1		
	51	30070232T	E G.G2 SPRING	E GEAR G2	1		
	52	300702119T	E S.SPRING	E SENSOR	1		
	53	300702118T	E GEAR G4		1		
	54	30070297T	E SENSOR BKT.		1		
	55	30070713T	F.RUBBER HOLDER		4		
	56	9W0250130T	POLY WASHER		1		
	58	30071125T	L GEAR B		1		

BLOCK NO. M2MM

⚠	REF.	PARTS NO.	PARTS. NAME	REMARKS	QTY	SUFFIX	CLR
	59	30071126T	L GEAR C		1		
	60	30071105T	L GEAR D		2		
	61	30071106T	L GEAR E		1		
	62	30070766T	F.SPRING	FLOATING	2		
	63	30070767T	F.SPRING	FLOATING	1		
	64	30070768T	F.SPRING	FLOATING	1		
	82	9P0420041T	SCREW(M2 X 4)	M2X5	17		
	83	9B1320041T	SCREW	M2X4	1		
	84	9P0420061T	SCREW	M2X6	1		
	85	9C2020301T	SPECIAL SCREW	M2X4	4		
	87	9P3026221T	CUP SCREW	M2.6X4	4		
	88	9P1720102T	SCREW	M2 X 10	1		
	89	9W0250080T	WASHER	2.6X4.5X0.5	1		
	90	9W0250110T	WASHER	M2X4	3		
	93	9B1220041T	SCREW	3X6X0.5	4		
	94	9P0720061T	P.TAP.SCREW	2.6X6X0.5	3		
	95	9C0320353T	SCREW	1.85X5X0.5	1		
	96	9P0420101T	SCREW	M2X2.5	1		
	98	9P0426051T	SCREW	M2X6	1		

(2) 3007 01 306T CONNECTOR PCB ASS'Y

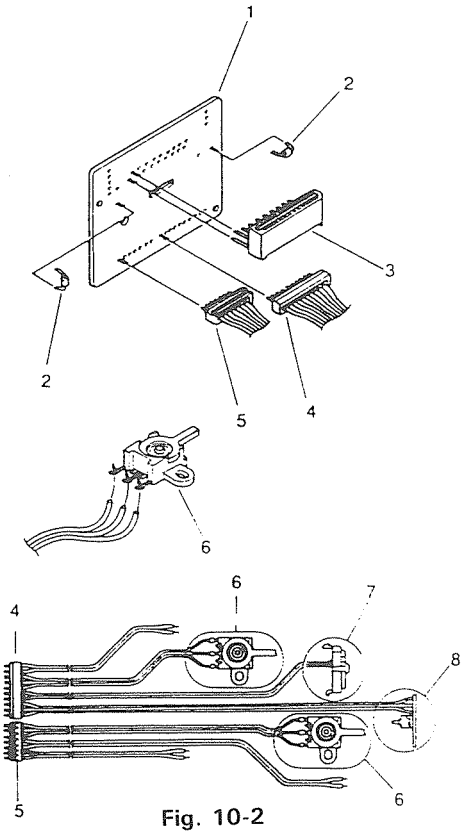


Fig. 10-2

Connector board ass'y parts list

BLOCK NO. M7MM

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	1	30070119T	CONNECTOR BOARD		1		
	2	68190503T	CARBON RESISTOR		2		
	3	VMC0163-R18	CONN.TERMINAL		1		
	4	30071016T	WIRE ASSY(10P)		1		
	5	30071015T	WIRE ASSY(7P)		1		
	6	64020801T	SLIDE SWITCH	SSCF21015A	2		
	7	300701309T	DISC SENSOR	BOARD A ASS'Y	1		
	8	300701302T	DISC SENSOR	BOARD B ASS'Y	1		

(3) 3007 01 309T DISC SENSOR PCB A ASS'Y

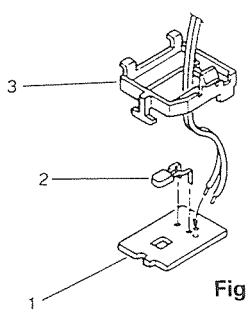


Fig. 10-3

Disc sensor board A ass'y parts list

BLOCK NO. M7MM

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	1	30070124T	PRINTED BOARD	D.SENSOR PCB A	1		
	2	30070127T	PH.TORANSISTOR		1		
	3	30070122T	SENSER BRACKET		1		

(4) 3007 01 302T DISC SENSOR PCB B ASS'Y

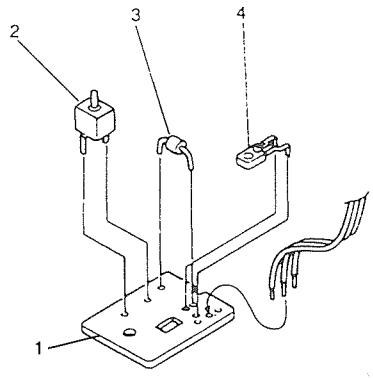


Fig. 10-4

● Disk sensor board B ass'y parts list

BLOCK NO. M7MM□□□

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	1	300701257	PRINTED BOARD	D.SENSOR PCB B	1		
	2	64020412T	LEAF SWITCH	SPPW81	1		
	3	68190503T	CARBON RESISTOR		1		
	4	30070128T	PHOTO DIODE		1		

(8) 3007 02 319T E SENSOR PCB ASS'Y

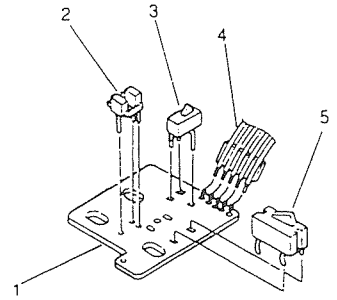


Fig. 10-5

● E sensor board ass'y parts list

BLOCK NO. M7MM□□□

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	1	300702104T	PRINTED BOARD	E SENSOR PCB W	1		
	2	68190801T	PH.INTERAPTOR	SP1-235-18	1		
	3	64010402T	PUSH SWITCH	MPU10160	1		
	4	300710139T	WIRE ASS'Y		1		
	5	64010401T	PUSH SWITCH	MPU10101	1		

(17) 3007 11 304T L SENSOR PCB ASS'Y

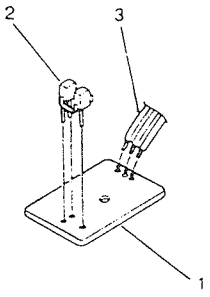


Fig. 10-6

● L sensor board ass'y parts list

BLOCK NO. M8MM□□□

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	1	30071116T	PRINTED BOARD	L SENSOR BOARD	1		
	2	68190801T	PH.INTERAPTOR	SP1-235-18	1		
	3	30071018T	FLAT WIRE		1		

(13) 3007 07 317T T.T BASE HOLDER ASS'Y

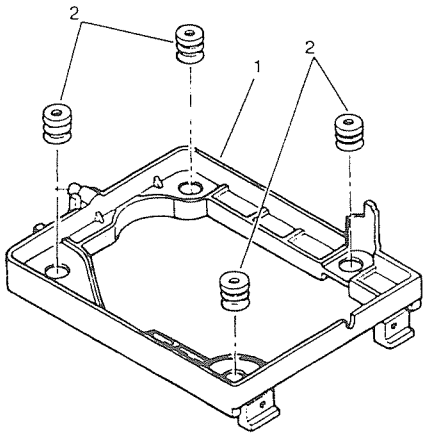


Fig. 10-7

● T. T. base holder parts list

BLOCK NO. M7MM□□□

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	1	30070761T	BASE HOLDER		1		
	2	30070741T	RUBBER BUSHING		4		

■ Cassette mechanism assembly section

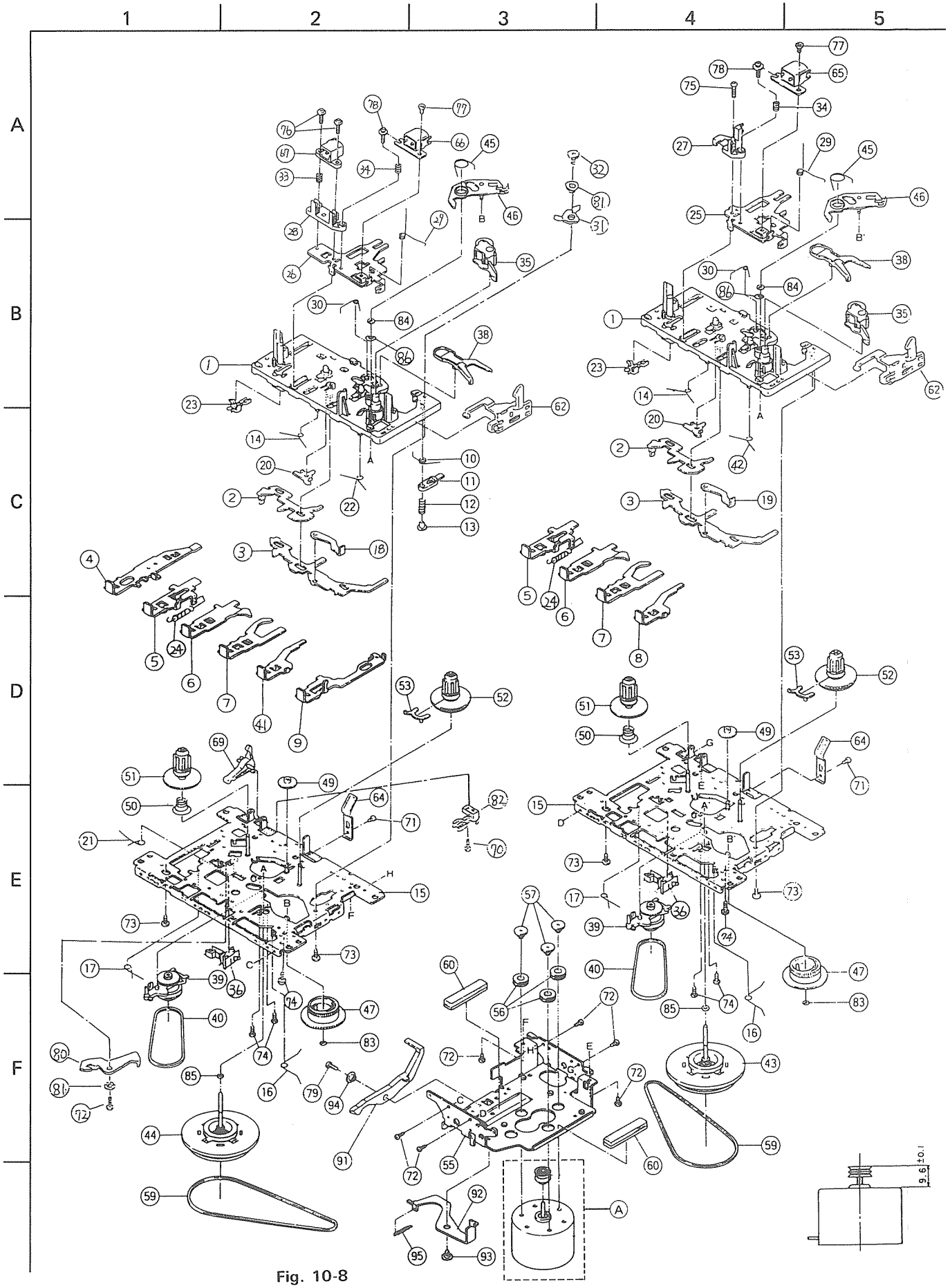


Fig. 10-8

● Cassette mechanism assembly parts list

BLOCK NO. M1MM[ ][ ][ ]

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	A	1921123187T	MOTOR ASS'Y	NO.58,68	1		
	1	192114316T	BASE ASS'Y		2		
	2	19211409T	SWITCH ACTUATOR		2		
	3	19211438T	PUSH B.ACTUATOR		2		
	4	19211422T	BUTTON LEVER	REC BUTTON	1		
	5	19211484T	BUTTON LEVER	PLAY BUTTON	2		
	6	19211424T	BUTTON LEVER	REW BUTTON	2		
	7	19211425T	BUTTON LEVER	FF BUTTON	2		
	8	19211426T	BUTTON LEVER	STOP BUTTON	1		
	9	19211461T	BUTTON LEVER	PAUSE BUTTON	1		
	10	19211413T	P CONT. SPRING		1		
	11	19211455T	PAUSE LEVER (E)		1		
	12	19211412T	SPRING	PAUSE LEVER	1		
	13	19211411T	PAUSE STOPPER		1		
	14	19211414T	TORSION SPRING	BUTTON LEVER	2		
	15	192101501ZT	CHASSIS ASS'Y		2		
	16	19211416T	TORSION SPRING	E.ACTUATER	2		
	17	19211417T	TORSION SPRING	P.S.LEVER	2		
	18	19211464T	E KICK LEVER		1		
	19	182101159T	E.KICK LEVER		1		
	20	19211420T	STOPPER		2		
	21	19211421T	TORSION SPRING	REC BUTTON	1		
	22	19211415T	TORSION SPRING	BUTTON LEVER(C)	1		
	23	MSW-1541T	LEAF SWITCH	MSW-1541T	2		
	24	18210150T	PLAY BUTTON LEV		2		
	25	19210311T	HEAD PANEL		1		
	26	19210314T	HEAD PANEL		1		
	27	19210304AT	HEAD BASE		1		
	28	19210306T	HEAD BASE		1		
	29	19210309T	PANEL P SPRING		2		
	30	19211418AT	SPRING	M CONTROL	2		
	31	19211434T	P.ROLLER ARM		1		
	32	99992041T	SPECIAL SCREW	M 2 X 3	1		
	33	18210308T	SPRING		1		
	34	18210307T	AZIMUTH SPRING		2		
	35	192104309T	P.ROLL. ARM ASY		2		
	36	640101161T	LEAF SWITCH	MSW-17820MVDO	2		
	38	19212604TT	SENSING LEVER		2		
	39	192107308T	RF CLUTCH ASS'Y		2		
	40	18210711T	RF.BELT		2		
	41	19211466T	BUTTON LEVER		1		
	42	19211433T	TORSION SPRING		1		
	43	192109304ZT	FLYWHEEL ASS'Y	PB MECHA.(B)	1		
	44	192109303ZT	FLYWHEEL ASS'Y	REC/PB MECHA.(A	1		
	45	19212605T	TORSION SPRING	GEAR PLATE	2		
	46	192126502ZT	GEAR PLATE ASSY		2		
	47	19212602T	CAM GEAR		2		
	49	18211070T	F.FORWARD GEAR		2		
	50	18211099T	BACK T.SPRING		2		
	51	192105304T	S. REEL ASS'Y	SUPPLY	2		
	52	192105303T	T. REEL ASS'Y	TAKE-UP	2		
	53	19210506T	SENSOR		2		
	55	19211211T	MOTOR BRACKET		1		
	56	18211266T	MOTOR RUBBER		3		

BLOCK NO. M1MM

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	57	18511418T	COLLAR SCREW		3		
	58	----------	MOTOR PULLEY		1		
	59	19210923T	MAIN BELT		2		
	60	19211212T	MAT		2		
	62	19211301T	EJ. SLIDE LEVER	EJECT	2		
	64	18291001T	PACK SPRING		2		
	65	MS15R-AA2N1	R/P HEAD		1		
	66	MS15R-AA2N1	R/P HEAD		1		
	67	62021419T	E.HEAD		1		
	68	----------	MOTOR	EG530YD-9BH	1		
	69	18211069T	REC.SAF.LEVER		1		
	70	91810000T	SCREW	M2 X 5	1		
	71	91790000T	TAPPING SCREW	M2 X 3	2		
	72	91800000T	SCREW	M2 X 4	7		
	73	96790000T	TAPPING SCREW	M2 X 5	4		
	74	99991809T	SPECIAL SCREW	M2 X 4.5	6		
	75	90040000T	SCREW(M2 X 6)	M2 X 6	1		
	76	92230000T	SCREW		2		
	77	91150000T	SCREW(M2 X 3)	M2 X 3	2		
	78	99220000T	SCREW(M2 X 7)	M2 X 7	2		
	79	9P0420061T	SCREW	M2 X 6	1		
	80	19210201T	REC ARM		1		
	81	19211437T	P ARM COLLAR		2		
	82	64010138T	LEAF SWITCH	MSW-1275	1		
	83	94220000T	POLY WASHER	1.2X3.8X0.3	2		
	84	99990313T	POLY WASHER	1.45X3.8X0.5	2		
	85	97860000T	POLY WASHER	2 X 3.5 X 0.3	2		
	86	99990003T	POLY WASHER	2.1X4X 0.13	2		
	91	19211209T	P.KICK LEVER(B)		1		
	92	18211268T	P.KICK LEVER		1		
	93	18211223T	COLLAR SCREW		1		
	94	18211265T	COLLAR (B)		1		
	95	18211225T	SPRING		1		

■ CD mechanism section

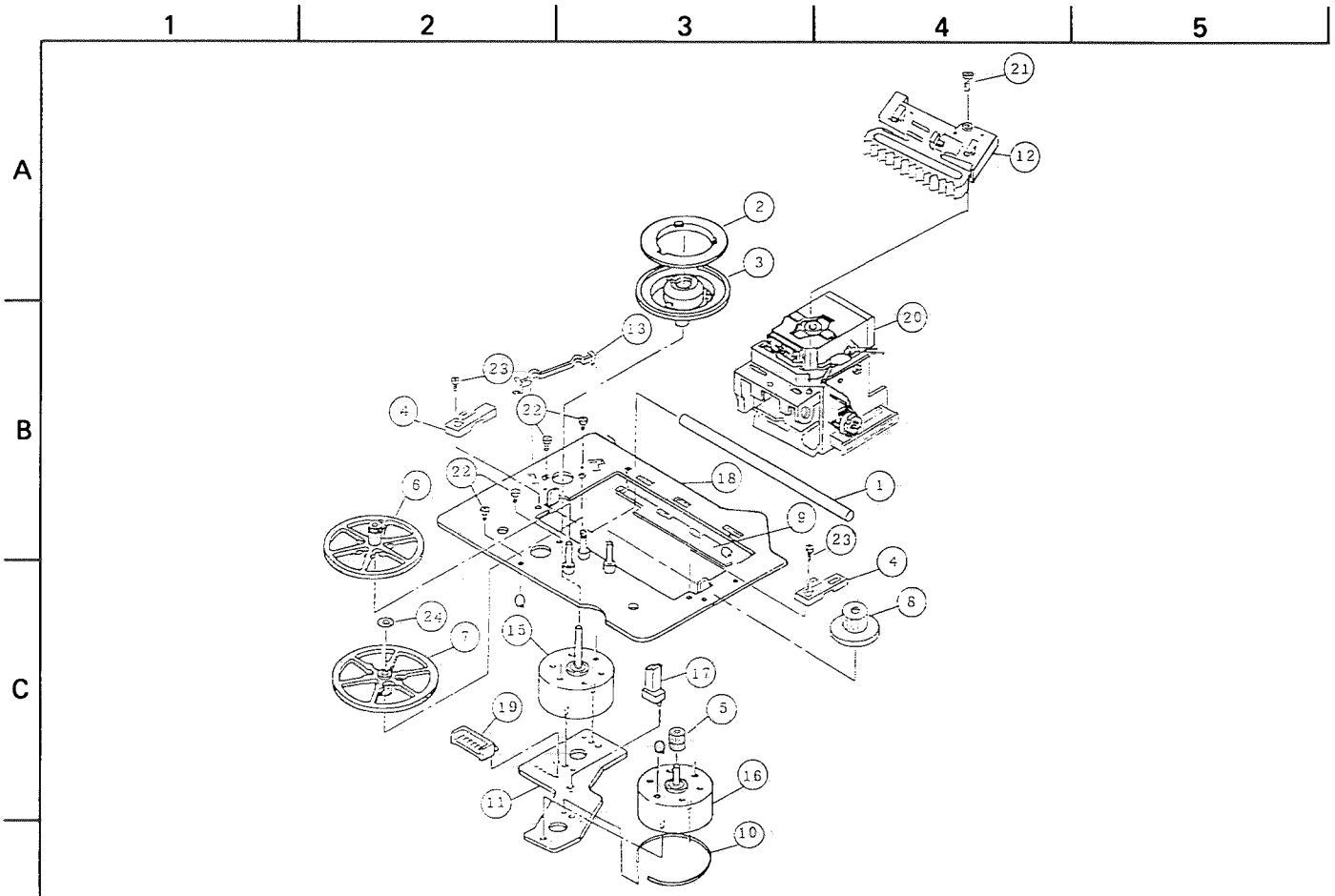


Fig. 10-9

● CD mechanism parts list

BLOCK NO. M7MM□□□

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	1	30020712T	PU.SHAFT		1		
	2	30050713T	T.T.PLATE		1		
	3	30070760T	TURN TABLE		1		
	4	300707502T	T.T.BASE ASS'Y		1		
	5	30070726T	CD GEAR A		1		
	6	30070727T	CD GEAR B		1		
	7	30070728T	CD GEAR C		1		
	8	30070729T	CD GEAR D		1		
	9	30070730T	PU SUPPORT		1		
	10	30070739T	TENSION ARM		1		
	11	30070746T	EARTH SPRING		1		
	12	30070764T	SHAFT HOLDER		2		
	13	30070751T	PRINTED PCB		1		
	14	60020902T	SPINDLE MOTOR		1		
	15	60020903T	GEAR MOTOR		1		
	16	640101195T	LEAF SWITCH		1		
	17	68020264T	CONNECTOR		1		
	18	9B1220061T	SCREW		1		
	19	9C0120253T	SCREW		4		
	20	9P0420061T	TAPPING SCREW		2		
	21	9W0640070T	WASHER		1		
	22	E307746-001	CD RACK		1		
	23	OPT1MA-6S	PICK-UP UNIT		1		

11 Illustration of Packing and Parts List

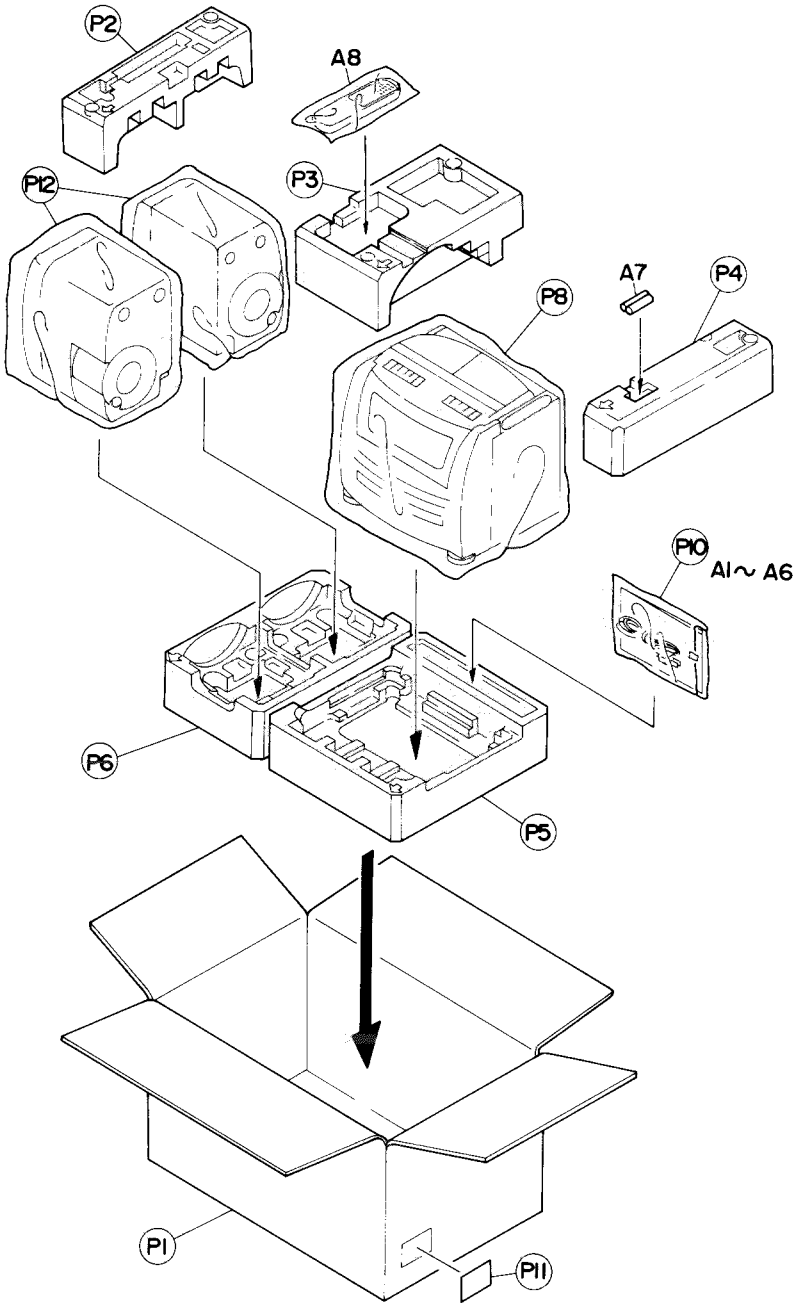


Fig. 11-1

● Packing parts list

BLOCK NO. M6MM

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	P 1	VPC7073-M001	CARTON		1		
	P 2	VPH1688-001	CUSHION(U.L)		1		
	P 3	VPH1688-002	CUSHION(U.C)		1		
	P 4	VPH1688-003	CUSHION(U.R)		1		
	P 5	VPH1688-004	CUSHION(BOTTOM)		1		
	P 6	VPH1692-001	CUSHION(SP.BOT)		1		
	P 8	VPE3026-005	POLY BAG	FOR RECEIVER	1		
	P 10	VPE3005-007	POLY BAG	FOR INST	1		
	P 11	----------	CARTON LABEL	046838061325	1		
	P 12	VPE3026-002	POLY BAG	FOR SPEAKER	2		

● Accessories parts list

BLOCK NO. M7MM[ ][ ][ ]

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
⚠	A 1	VNN7073-111M	INSTRUCTIONSE		1		
	A 2	VNC1200-106	CAUTION SHEET		1		
	A 5	V04062-001	CONTI.PLUG		1	U	
		ENZ2202-001	SIEMENS PLUG		1	US	
⚠	A 6	QMP7530-183	POWER CORD		1	U	
⚠		QMP39F0-183	POWER CORD		1	US	
	A 7	R6SPTT-2STSA	BATTERY		1		
	A 8	VGR0051-101	REMO-CON UNIT	RM-RXP1070	1		

JVC
VICTOR COMPANY OF JAPAN LIMITED
AUDIO PRODUCTS DIVISION 10-1, 1-chome,Ohwatari-machi, Maebashi-city, Japan

(No.10013)

Printed in Japan
-H0811-V-